January
Staff Report

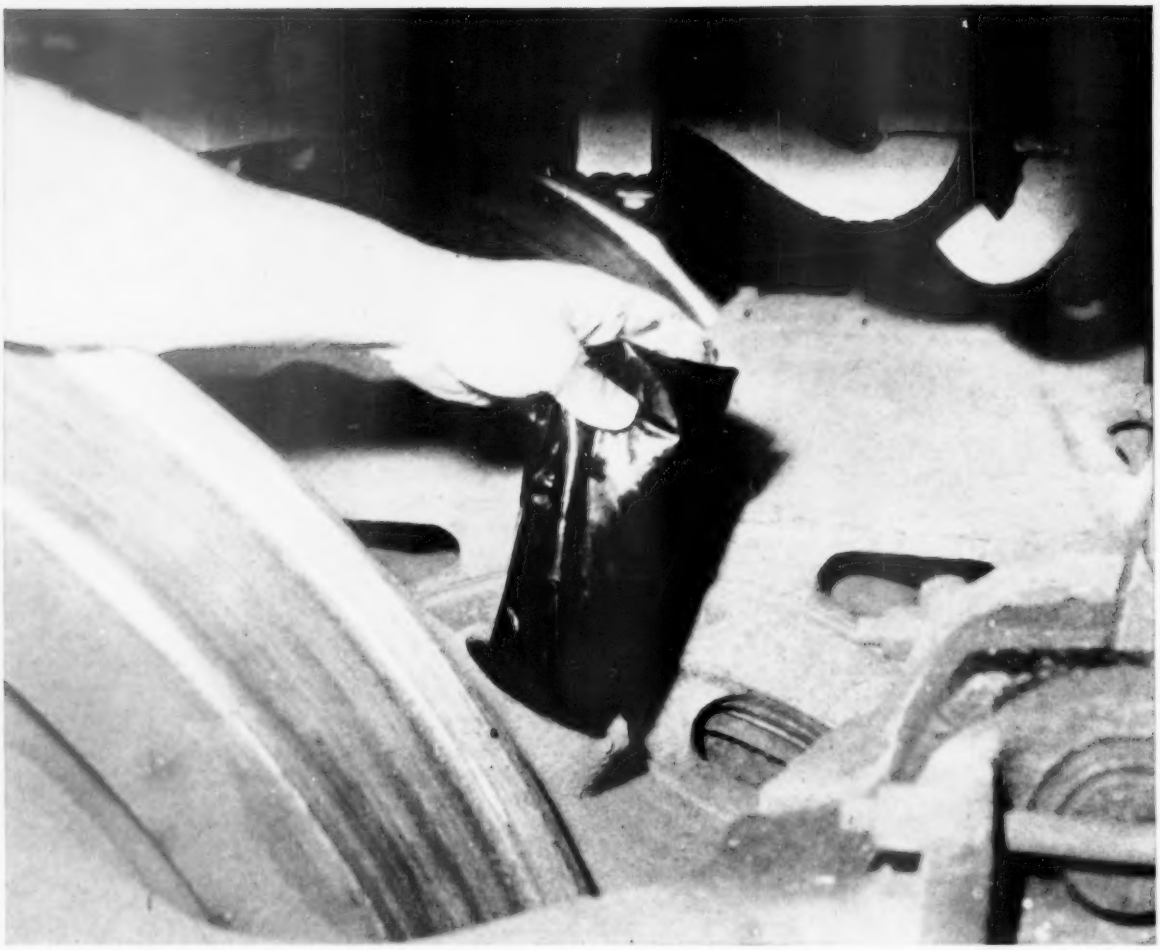
January 19, 1959

RAILWAY AGE *weekly*

1958...1959

Annual Review and Forecast

One Dollar A Simmons-Boardman TIME-SAVER Publication



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ROCK BOLTS PROMOTE SAFETY

The Bethlehem slotted rock bolt is ideal for keeping rock under control, not only in tunnels but also in open cuts. It locks together stratified rock slabs, reducing the danger of slides and roof falls.

In addition to the 1-in. slotted bolt, Bethlehem also produces a headed rock bolt, which performs the same function. It comes in ⅞-in. and 1¼-in. diameters, and is used with an expansion shell. When the bolt is tightened, the leaves of shell expand, locking bolt in the hole.

Rock bolts may be just the solution you've been looking for along your right-of-way. For details, get in touch with the nearest Bethlehem sales office.

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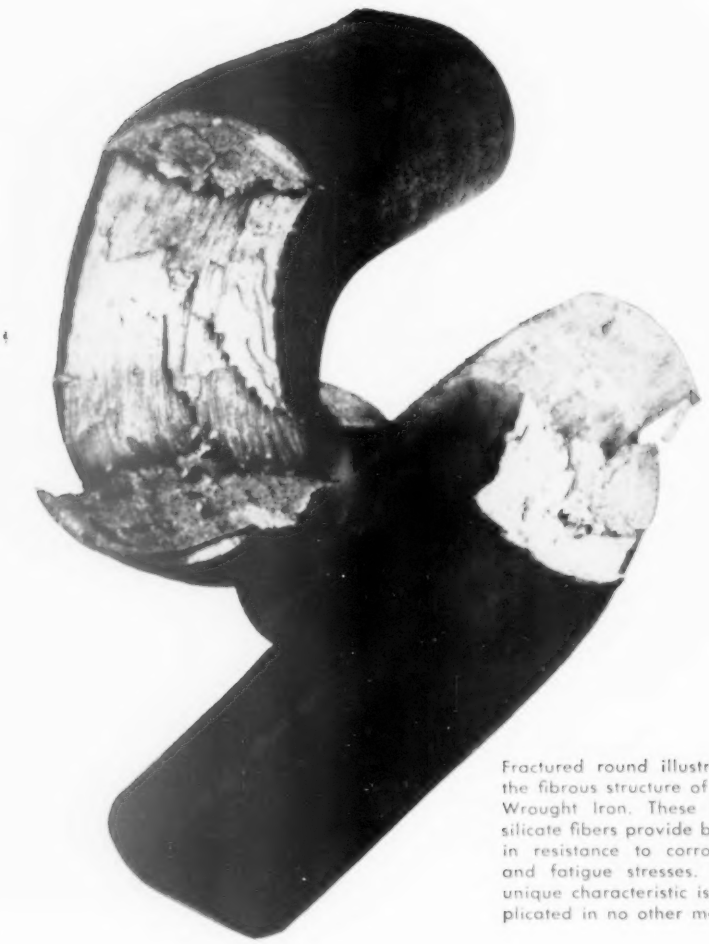
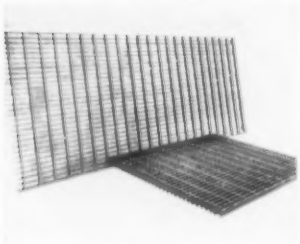
BETHLEHEM STEEL



Fractured round illustrates the fibrous structure of 4-D Wrought Iron. These iron silicate fibers provide built-in resistance to corrosion and fatigue stresses. This unique characteristic is duplicated in no other metal.

SPRING BANDS

TIE SPACERS



GRATINGS

RAILINGS

PITTSBURGH—"A full line of 4-D Wrought Iron bars, rounds and angles is now available from A. M. Byers Company. Bars are available in lengths up to 30 feet. Orders will be shipped within 2 to 7 days after receipt in Pittsburgh."—*A. S. Chalfant, Vice President.*

To meet the expanding market applications of our specifiers, Byers is now geared for quick service on 4-D Wrought Iron bars and shapes.

Our company has *always* manufactured Wrought Iron bars and shapes in limited sizes. But increased demand for 4-D Wrought Iron in commercial, industrial, and residential specifications has prompted us to supplement our line even more fully.

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Availability of a full line of 4-D Wrought Iron bars, rounds and angles—with dependable, rapid-fire delivery—now enables specifiers to install complete jobs with this time-proven metal. Now, you need no longer use ferrous substitutes in such applications as: tie spacers, spring bands, hand railings, gratings and fasteners. We would welcome an opportunity to discuss these applications in detail with you.

Ask the Byers representative for specific information. Or, write us for a prompt reply. A. M. Byers Company, Clark Building, Pittsburgh 22, Pa.

BYERS 4-D WROUGHT IRON

TUBULAR AND FLAT ROLLED PRODUCTS

ALSO AMBALLOY ELECTRIC FURNACE STEEL PRODUCTS AND PVC PIPE AND SHEET

Corrosion costs you more than Wrought Iron

RAILWAY AGE *weekly* January 19, 1959 • Vol. 146, No. 3

Week at a Glance

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on the 1959 equipment recommendation lists of the vast majority of roads using power tampers. The reason is simple: Judged from any angle, versatility, economy, efficiency, or dependability, the JACKSON MAINTAINER is decidedly superior . . . more than ever for '59 with its much more powerful tamping motors which speed up penetration and decrease the number of insertions required. It gives you maximum consolidation under each tie and right under the rail, the vital load-bearing zone . . . in all kinds of ballast materials . . . in all lifts of track, in all production tamping . . . faster and better spot tamping than can be done by any other means. Let us give you the facts which so plainly indicate why most roads are using JACKSON MAINTAINERS, and lots of them. Why not phone, right now, for any information desired.

Acquirement plans to suit your needs.

JACKSON VIBRATORS, INC.
LUDINGTON, MICHIGAN

Week at a Glance CONT.

Current Statistics

Operating revenues	
11 mos., 1958	$8,725,891,095
11 mos., 1957	9,680,380,433
Operating expenses	
11 mos., 1958	6,888,018,585
11 mos., 1957	7,554,151,138
Taxes	
11 mos., 1958	877,221,337
11 mos., 1957	1,012,134,553
Net railway operating income	
11 mos., 1958	683,636,809
11 mos., 1957	863,652,558
Net income estimated	
11 mos., 1958	511,000,000
11 mos., 1957	664,900,000
Average price 20 railroad stocks	
January 12, 1959	110.20
January 13, 1958	66.57
Carloadings revenue freight	
One week, 1959	467,699
One week, 1958	472,284
Freight cars on order	
December 1, 1958	27,962
December 1, 1957	59,194
Freight cars delivered	
11 mos., 1958	38,058
11 mos., 1957	92,891

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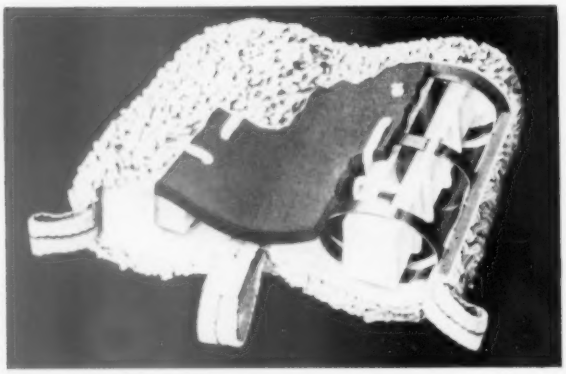
to the freight car HOT BOX PROBLEM

Magnus Lubricator Pads and R-S Journal Stops give two-way protection against all major causes of road setouts due to bearings— provide the bearing performance railroads WANT, at a cost they can AFFORD TO PAY—RIGHT NOW!

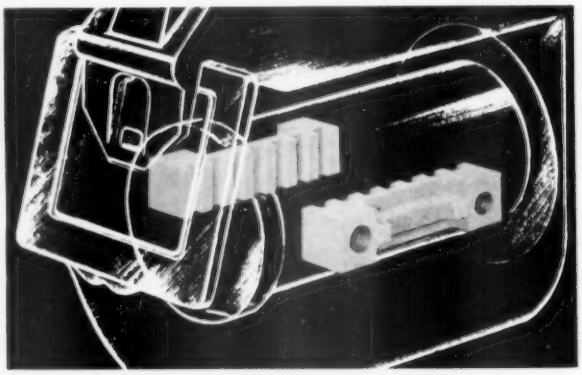


MAGNUS LUBRICATOR PADS

wick more oil, hold more oil, provide uninterrupted journal lubrication

Use Magnus Lubricator Pads to deliver the maximum amount of oil to the journal from an abundant oil supply. There's 3-way wicking—circumferential, internal and center-feed—and each pad holds 2.5 times its own weight in oil—better than 5.9 pints for the 6"x 11" size.

Rugged one-piece twin-lobe construction assures long life. Thoroughly tested internal springs provide *maximum and constant* resilience—pads just can't lose contact with journal during their useful life. The cover is heavy pre-shrunk duck, tufted with quality cotton yarn and backed by high-capillarity felt. In all, it's a lubricator pad designed by bearing experts to give you the performance you want and need.



MAGNUS R-S JOURNAL STOPS

stabilize the whole bearing assembly— double bearing life, cut hot boxes 90%

With R-S Journal Stops you keep the bearing in proper position at all times—restrict fore-and-aft movement of the axle to 3/32" in either direction. That prevents dust guard damage, lets oil seals work. You increase miles per hot box ten times, *miles per cut journal* fifteen times. You reduce wheel flange wear, cut truck maintenance costs all along the line.

Initial cost is low—less than 2% of new car cost—and you get that back in less than 3 years. That's why R-S Journal Stops are your best bet for better bearing performance.

For complete information on R-S Journal Stops and Magnus Lubricator Pads write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.

MAGNUS

SOLID BEARINGS
R-S JOURNAL STOPS
LUBRICATOR PADS

MAGNUS METAL CORPORATION *Subsidiary of* **NATIONAL LEAD COMPANY**

Merger Proposal Due Feb. 19

NYC's Perlman, denying he has closed the door on merger talks with the PRR, reiterates proposal for studies involving all eastern roads. Meanwhile, he foresees big savings in coordination.

► **The Story at a Glance: New York Central President Alfred E. Perlman will ask the Eastern Railroad Presidents Conference on Feb. 19 to consider his proposal for merging eastern roads into "three or four" economically-balanced systems (RA, Jan. 12, p. 5).**

He doesn't think, however, that this sounds the "death knell" for NYC-Pennsylvania merger talks. He's "pleased" with the studies already completed, says they have pointed to great potential savings through coordination of facilities.

Following suspension of the NYC-PRR talks, seven other eastern roads have called off their own studies of the "impact" of such a merger.

In New York City last week, the president of the New York Central faced reporters to answer questions arising out of the Central's unexpected announcement that it is suspending merger talks with the Pennsylvania.

"We haven't called off the merger," Mr. Perlman asserted. He said it was "absolutely not true" that the Central was trying to "ease out" of talks with the Pennsylvania.

When the PRR-NYC discussions began over a year ago, he continued, no other roads were interested—although, he said, they had an opportunity to participate.

In the meantime, he went on, other groups began to show interest in mergers. A group of eastern roads met in Cleveland to discuss the "impact" of a PRR-NYC merger (although they denied they were contemplating a counter-merger). And five New England roads began to talk about merging into a New England regional system.

It was this "change in climate," Mr. Perlman indicated, that led the NYC's board of directors to suspend studies with the PRR, and recommend that all eastern roads consider merging into "three or four systems of nearly-balanced economic strength—consisting of both large and small railroads."

He said he would present the proposal to the ERPC at its next meeting Feb. 19.

(Prior to Mr. Perlman's press conference, the seven eastern roads that had been worried by the possible "impact" of an NYC-PRR merger announced suspension of their own talks. In a joint statement, the roads said: "In view of the announcement by the directors of the New York Central, terminating merger discussions between the Central and Pennsylvania, the question has become moot." The statement was issued in Cleveland, following a meeting attended by Howard E. Simpson, president of the Baltimore & Ohio; Owen Clarke, vice president of the Chesapeake & Ohio; Perry M. Shoemaker, president of the Lackawanna; William White, president of the Delaware & Hudson; Harry W. Von Willer, president of the Erie; L. L. White, chairman, and F. S. Hales, president, of the Nickel Plate; and Joseph A. Fisher, president of the Reading.

(The New England railroads that have been considering merger decided in mid-December to suspend their discussions indefinitely.)

In discussing the advantages of a balanced system over a merger of corporate giants that might freeze out smaller railroads, Mr. Perlman commented, "I'd like to see all the railroads

GM Diesel's Newest—1,200-hp GMD-1

General Motors Diesel Ltd. has delivered (to Canadian National) its first GMD-1—a dual-purpose road switcher type locomotive for branch line service. CNR has placed orders for 68 such units, 50 equipped with six-wheel trucks and 18 fitted with four-wheel trucks, steam generators and 89-mph gearing. GM Diesel designed and engineered the new model during the past year, to meet the low axle-load requirements of branch line operation in Canada. With six-wheel trucks, the unit provides an axle loading of 40,000 pounds. Loading with four-wheel trucks is 62,000 pounds. The 1,200-hp model can be geared for either 65- or 89-mph speeds. GMD-1 is the third new type to be completely engineered by GM Diesel. The others: a narrow gage locomotive for the CNR, and a diesel-hydraulic unit on demonstration in South America.

do well. The balanced system would more nearly keep the industry healthy."

Mr. Perlman indicated that it was the Pennsylvania that had initiated the NYC-PRR merger study. He commented that "When I first started talking to Mr. [J. M.] Symes of the Pennsylvania, it was on the basis that we were the only two willing to talk to each other."

If nothing comes of his plan for broader mergers, Mr. Perlman said he hoped the studies with the PRR could be resumed.

Short of actual merger, he added, the studies by the two big roads have indicated broad areas of savings possible in coordination of facilities.

Among the possible areas of coordination Mr. Perlman mentioned were harbor facilities, passenger routes and facilities, interchange points and joint trackage. Coordinating passenger service of the two lines, Mr. Perlman said, would result in savings of about $14,000,000 annually. As possible examples of coordination, he mentioned passenger service to St. Louis and joint use of Detroit terminal facilities.

There was no immediate reaction from the Pennsylvania. But earlier, following the NYC's original announcement that it was suspending the talks, Mr. Symes had commented:

"Quite frankly, I am disappointed. . . . I, too, am pleased with the results of the studies, but am amazed as to the lack of any definitive action by them in connection therewith. It is well recognized throughout the industry that coordination of facilities is not a substitute for corporate mergers—if it were, the question of mergers would not now be considered. We will, in due course, comment on the subject more fully as our stock and other security holders, our employees, the public authorities and the public in general are entitled to be informed on the subject."

Mayors, RR Presidents Form Transit Committee

Meeting in Chicago last week, mayors of 11 cities and chief executives of 16 railroads approved formation of a joint study committee to seek a solution to the problem of mass transportation.

Decision to hand the issue over to five railroad presidents and seven mayors grew out of a lengthy discussion which pointed up:

- **The opposition of western carriers to any form of subsidy.**
- **The willingness of most eastern roads to accept subsidies "in the spirit of the times."**

AWR President Clair M. Roddewig said roads in his area neither need nor want subsidy. New Haven President George Alpert was a spokesman for the subsidy group.

Watching Washington *with Walter Taft*

• **SERIES OF LESSONS** on "how not to run a railroad" is a new project of the Railway Labor Executives' Association. The lessons, being issued as press releases, are based on "unsolicited letters of complaint against railroad management policies." RLEA, so it says, is receiving such letters "in increasing numbers from people all over the country as a result of the deterioration of much railway passenger service."

TEXT FOR THE FIRST LESSON is a letter predicting that railroads "will continue to lose passenger business to airlines so long as there continues to be the generally uncooperative, even rude, attitude and treatment from ticket office employees." The writer concedes that "once one gets on a train there is, in general, rather good service."

COMMENT from President George M. Harrison of the Brotherhood of Railway Clerks rounds out the RLEA release. He says the unions have protested "recent drastic layoffs" of ticket clerks and other employees, which "have left the railroads far understaffed to perform, not only essential public services, but adequate maintenance and safety inspections."

NO BRIEF FOR RUDENESS is held by RLEA, Mr. Harrison also says. But he suggests the public "should understand that, even with the best desire possible to be cooperative, clerks who are being made to handle several times the amount of work they can properly do must inevitably appear to be neglecting their public responsibilities." He goes on to give labor's pledge "to continue its efforts to make carriers face up to their public responsibilities to provide railroad passengers with a transportation service that is second to none."

• **RECONSIDERATION** of its Central of Georgia acquisition case is being sought by the Frisco. The case involves Frisco's purchase of substantial C. of Ga. stock before applying to the ICC for authority to control that road. The Commission conceded that the public interest would be served by the acquisition, but nevertheless denied the application. It found the public interest also concerned with "observance of the law," and said its sanction of Frisco's "unlawful" conduct might encourage others to present a similar *"fait accompli . . ."*

MAJOR ERROR OF LAW and "sudden and complete reversal" of the Commission's former position is what Frisco calls this idea that an admitted public interest in the unification should be subordinated to an "alleged public interest" in preventing violations of the Interstate Commerce Act. Such a holding reminds the road of "the ancient Chinese practice of burning down the house in order to roast the pig."

INTEREST in the case has been expressed by the House Interstate Commerce Committee which has used it as a basis for recommending a tightening of the act's security-issue provisions. When the case is finally disposed of at the ICC, the committee plans an investigation to determine whether "improper pressure" was applied at any stage.

Where railroad progress is cast in steel....

MODERN FREIGHT CAR SERVICE REQUIREMENTS *DEMAND* GENERAL STEEL UNDERFRAME ENDS

The critical area is within the orange circle and it is here that General Steel engineers have designed a casting with metal distributed to the exact point where it is needed to eliminate failures in critical stress areas.

Railroad maintenance costs are high, and revenue is lost unnecessarily due to underframe failures. These failures occur in the underframe ends as a result of stresses created by longer and faster trains, plus the unusually rugged service required in the handling of cars.

General Steel has conducted an extensive cross-country inspection of 5000 freight cars built since 1940 which points out serious failures that could have been avoided by the use of cast steel underframe ends.

Cost-conscious railroad men are eliminating such problems by equipping new and rebuilt box cars, refrigerator cars and other freight equipment with General Steel one-piece, cast steel underframe ends. These ends have increased impact resistance in critical areas, eliminating body bolster failures . . . they resist rust and corrosion, and provide infinitely longer freight car life with practically no upkeep costs.

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. • EDDYSTONE, PA. • AVONMORE, PA.

By WALTER J. TAFT
Washington Editor

Legislation to liberalize the Railroad Retirement and Railroad Unemployment Insurance Acts will pass, and this labor-minded Congress is not apt to give railroads much in the way of compensating amendments. Tax relief could come and progress could be made on the user-charge proposal, but diversification issue is not likely to be settled this year.

Political Fight Will Continue

The railroad industry this year is seeking Congressional action on major parts of its legislative program which were left as "unfinished business" when the Transportation Act of 1958 was passed. It will thus have another busy time on Capitol Hill, though its presentations will be less dramatic than its "pitch" for the 1958 act.

The principal change in Congressional climate, as the railroads feel it, will be the increased labor influence. Railway Labor's Political League has claimed that 83% of the candidates it endorsed were elected to the new Congress. While losers included Senator Bricker, a good friend of the railroads, the chairmanships of committees handling transport legislation have not changed. Senator Magnuson of Washington and Representative Harris of Arkansas, Democrats, still head the Senate and House Committees on Interstate and Foreign Commerce.

Six Basic Proposals

Top priority will be given by the railroads to these proposals:

1. Reexamination of the railroad retirement and unemployment insurance systems, this to be a counter-proposal to the drive for liberalized benefits which railroad labor organizations have renewed.

2. Diversification, which means more freedom for railroads to operate other modes of transportation.

3. Tax relief to provide more realistic depreciation and replacement arrangements and permit accumulation of construction reserve funds.

4. Repeal of the 10% tax on passenger fares.

5. Imposition of adequate user charges on publicly provided transport facilities.

6. Repeal of the Interstate Commerce Act's so-called agricultural exemptions, which are applicable to motor transportation—or extension of them to all transportation of the exempt commodities.

The outlook generally is that liberalizing amendments to the Railroad Retirement and Railroad Unemployment Insurance Acts will be approved. And the railroads will be lucky to get offsetting comfort through elimination of what they consider some of the systems' deficiencies.

Diversification is a controversial issue which most informed observers don't expect to be settled this year. Some hope is entertained for repeal of the fare tax in view of last year's repeal of the levy on freight bills. Best guess on tax relief for depreciation purposes seems to be that it won't come to railroads alone, but could come in legislation applicable to all industry, including railroads.

The budgetary situation may advance the user-charge cause, which is already accepted in principle by the Eisenhower Administration. As to the agricultural exemption, Congress is unlikely to go along on complete repeal; it might see the logic of extending it to give railroads and water carriers the same freedom which truckers now enjoy.

Railroad labor's program for liberalizing the retirement and unemployment insurance systems is the same as that embodied in the so-called Morse bill (sponsored by Senator Morse of Oregon) which failed to get through last year. When it was then under consideration, President Daniel P. Loomis of the Association of American Railroads said the program would increase railroad costs at least $125 million a year.

Labor nearly won that 1958 battle. The Morse bill passed the Senate toward the end of the session and came up promptly in the House under procedures which involved by-passing that body's powerful Committee on Rules. That created a parliamentary situation under which it could come to a vote only if the rules were suspended by unanimous consent, and this was denied by Representative O'Hara of Minnesota, who was not a candidate for re-election. No such eleventh-hour "crisis" is anticipated in this more-labor-minded Congress.

To Fight Cost Rise

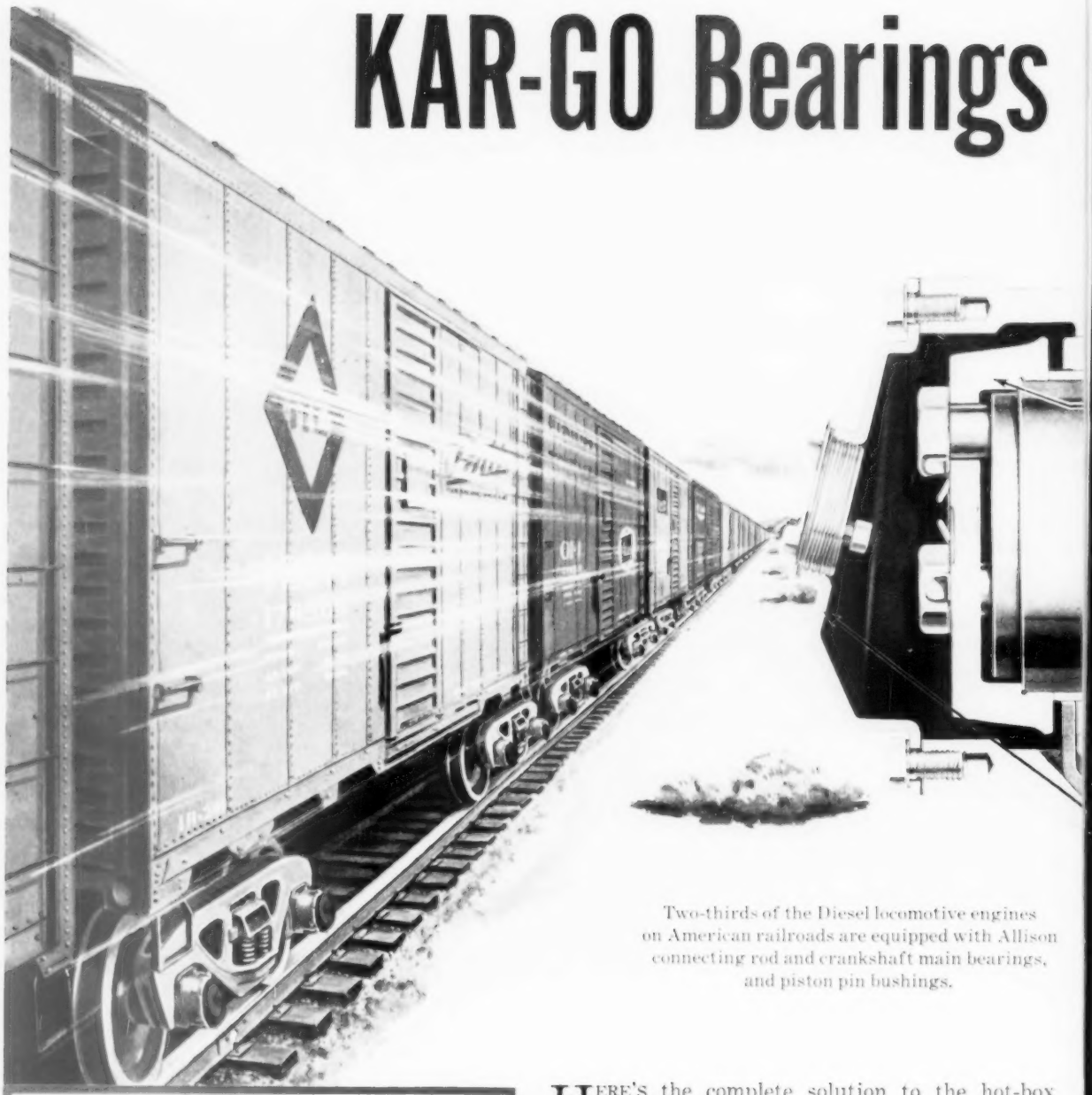
Meanwhile, the railroads will offer their program of amendments designed to minimize the threatened increase in costs. These management proposals will be based on studies of the systems' growing costs as compared to costs of the general social security system. They may be expected to emphasize, for example, that railroad retirement taxes are about three times the social security levies, but maximum benefits are only about 71% more. And that railroads support minimum unemployment-insurance benefits ranging from 125% to 675% greater than minima paid to unemployed of other industries which are under state systems.

Again considering Congress' labor-mindedness, any such management proposals will encounter tough going if they are strongly opposed by the unions. But the case is not considered hopeless by some Washington representatives of the railroads. They point out that labor unsuccessfully opposed some provisions of the Transportation Act of 1958. And they quote the adage—"Not failure but low aim is crime."

The diversification proposal is opposed by truckers, water carriers and

(Continued on page 18)

KAR-GO Bearings



Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison connecting rod and crankshaft main bearings, and piston pin bushings.

AAR APPROVED

for limited application in interchange service

Having complied with standardization details, AAR approval has been obtained for wider application to freight cars in general interchange service.

- **K**eeps lubricant sealed in – dirt sealed out.
- **A**verages one inspection every 20,000 car miles.
- **R**epays its cost in two years by cutting maintenance and operating expense.
- **G**oes 75,000 bearing miles on 1 pint of oil.
- **O**ffers railroads a low-cost solution to the hot-box problem.

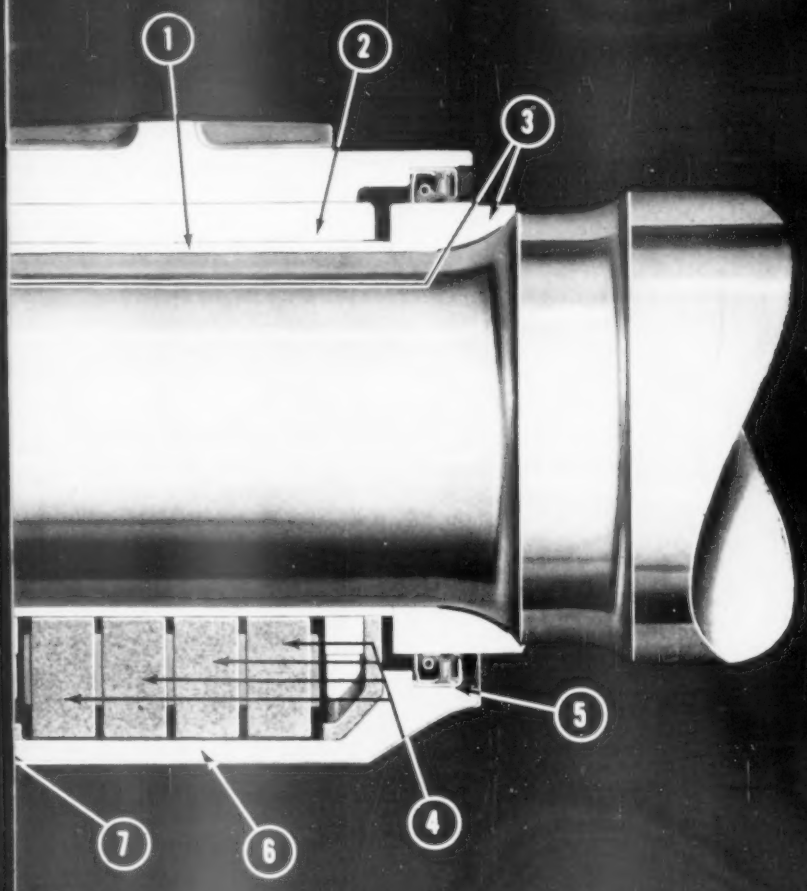
HERE'S the complete solution to the hot-box problem – designed for railroads hauling longer trains on faster-than-ever schedules.

It's the Allison KAR-GO Cartridge Bearing – better by far than any "gadgetized" journal brass bearing because *it combines rugged low-cost construction with sealed-in low-maintenance features.*

The fact that KAR-GO can whip the hot-box problem at a penny-pinching price is proved by millions of in-service railway miles and three years of

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS.

end hot boxes at lowest cost



THE INSIDE STORY

Built to run for thousands and thousands of miles, the Allison KAR-GO Cartridge Bearing gives you a sure answer to the hot-box problem at a new, low cost.

1. JOURNAL SLEEVE
Smooth, hardened surface for maximum bearing life—eliminates axle wear.

2. ALUMINUM ALLOY BEARING
Economical, precision-fitted, full round for maximum heat dissipation.

3. THRUST RING AND CAP
Absorb lateral thrusts on hardened faces. Ring provides highly finished surface for oil seal.

4. FELT WICK LUBRICATOR
Insures adequate oil delivery to bearing—spring-loaded to make constant contact with journal sleeve.

5. OIL SEAL
Double lip, automotive type; keeps oil in—dirt and water out.

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rugged field testing. In fact, these bearings will actually pay for themselves in two years by maintenance savings and elimination of service failures. What's more, once you go for your first set of KAR-GO bearings, you'll find more of these bearings can be added to your new car fleet from savings in hot-box elimination alone.

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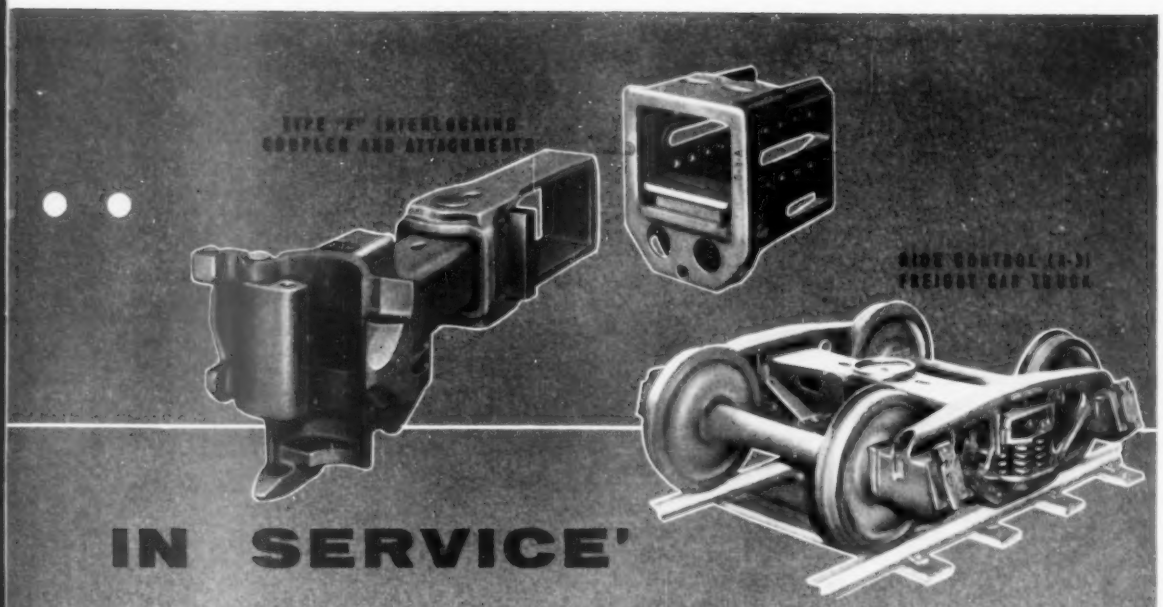

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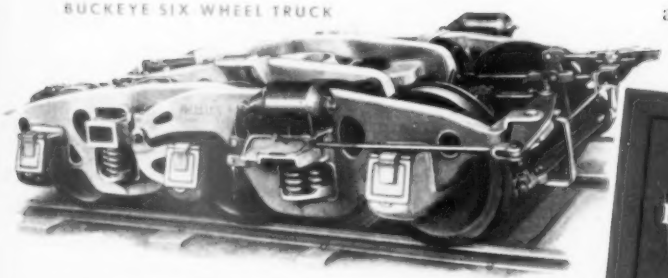

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POLITICAL FIGHT

(Continued from page 13)

railroad labor. A sample of opposition presentations to come was a recent statement by the president of American Trucking Associations, J. Robert Cooper. The trucking industry's "bright" prospects for 1959 "might be shadowed by efforts of railroads to gain full entry into the motor carrier business," Mr. Cooper said, adding: "Common ownership would destroy the trucking industry and legalize monopoly to the detriment of the public."

Also militating against this proposal are suggestions that adequate coordination could be accomplished if railroads generally would participate in joint rates and through routes with motor carriers. Such suggestions have come from members of the Interstate Commerce Commission; and from Chairman Magnuson of the Senate Committee on Interstate Commerce.

The tax-relief proposal to provide more realistic depreciation and replacement arrangements is a three-part proposition. It calls for deduction from taxable income of amounts accumulated in construction reserve funds, maximum depreciable lives of 15 years for railroad rolling stock and 20 years for fixed property, and authority to write off, at replacement time, the difference between the depreciation reserve on the retired property and the cost of the replacement unit.

No Special Treatment

While railroad representatives on Capitol Hill think they can make a good case for special treatment of the railroads, the best prospect here, as indicated in the foregoing, is legislation applicable to all industry. It seems that only something like a severe car shortage could get the railroads exceptional treatment.

The drive for repeal of the 10% tax on fares will have backing like that which convinced Congress to end the freight tax. While the feeling is not so intense as it was against the freight levy, the fare tax has only the same friends—those who put government revenue considerations to the fore. If a repealer got to the Senate or House floors, it would undoubtedly pass. Thus the real hurdles are committees handling revenue matters — Ways and Means in the House and Finance in the Senate.

If these same revenue considerations result in any progress toward providing adequate user charges, the advances will probably be in the highway and air transport fields. A recommendation that more be collected from highway users is contained in President Eisenhower's budget message which proposed an increase in the federal tax on gasoline. No user-charge legislation applicable to inland waterways is expected this year.

The idea of extending the agricultural exemption to railroads and water carriers (if the repeal proposal be rejected) is a new one. If they can't put it over, the railroads will support legislation to prohibit private truckers from carrying the exempt commodities for hire.

Other RR Needs

Aside from these six proposals, which have been given priority, the railroad industry's legislative program, of course, covers many other things. These include repeal of the Interstate Commerce Act's provision exempting water transportation of commodities in bulk from regulation; reciprocal tax relief whereby local tax concessions or other community aid received by railroads would be deductible for federal income-tax purposes; repeal of the fourth section; repeal of the commodities clause which forbids railroads from transporting commodities (except their own supplies) in which they have any interest; shortening the period (now seven months) for which the ICC can suspend a tariff; requiring certificates of convenience and necessity from the ICC for waterway projects; limiting the Post Office Department to use of common carriers for the transportation of mail.

Railroad advocacy of the foregoing will be on something like what military men call the target-of-opportunity basis. If a movement starts in any of these areas the railroads will join it. One such movement, for example, could be a drive for repeal of the bulk commodity exemption applicable to water carriers. This has been recommended by the ICC in its annual report. Also, the Railway Labor Act might come up for amendments sponsored by the air transport industry as a result of the recent strikes. That would give railroads a chance to propose amendments, too, but the Railway Labor Executives' Association has said it does not favor changing the act.

Against 'Make-Work' Measures

Meanwhile, the railroads will be opposing some legislation, especially "make-work" measures sponsored by RLEA. These will include bills to give the ICC authority to prescribe rules for the operation of track motor cars and for the inspection and maintenance of tracks and bridges. Recent Congresses have failed to act on these proposals, but a similar one got through last year. It was the brake-inspection act, which gave the ICC power to prescribe regulations for the inspection, testing and maintenance of train brakes.

Management may also be expected to oppose amending the 1958 Act's service abandonment provisions. This is also being proposed by RLEA which has said it might even seek repeal of the provisions.

How fast railroad legislation (other than pension and unemployment act liberalizers) gets under way may depend on what the Senate Committee on Interstate Commerce does about the so-called Senate Resolution 303 investigation. That's a seven-part study of problems left untouched by the Transportation Act of 1958.

The study is set up to include inquiries into the need for regulation under present conditions, subsidy policies and the desirability of user charges, ownership of one form of transportation by another, federal policy on mergers, the kind and amount of railroad passenger service needed to serve the public interest and the national defense, and problems arising from ICC actions granting relief from the long-and-short-haul clause. Also, the resolution has a general authorization under which the committee can expand the study to get into any matter "of federal regulation (and exemption therefrom) and federal promotional policies in regard to various forms of transportation."

Study Might Drag On

Although the staff for this study was originally expected to be appointed and organized before the end of last year, it was still not appointed when Congress convened this month. That means the study could be slow getting under way and might drag on through most of the present session. And that could hold up legislation on any matter involved—if the committee took the position that it would await results of the study before clearing such legislation. On the other hand, there is no such situation in the House, where proposed transport legislation can be progressed in the usual manner.

This year should also bring definite indications of how the Transportation Act of 1958 is working out. Cases based on its provisions have come to the ICC, but the commission said in its annual report that "benefits that may be expected . . . will not be fully apparent for many months." Most interesting of the pending cases is, perhaps, the eastern railroads' proposal to cut rates on paint. This may well bring forth the commission's interpretation of the 1958 Act's rate-freedom provisions.

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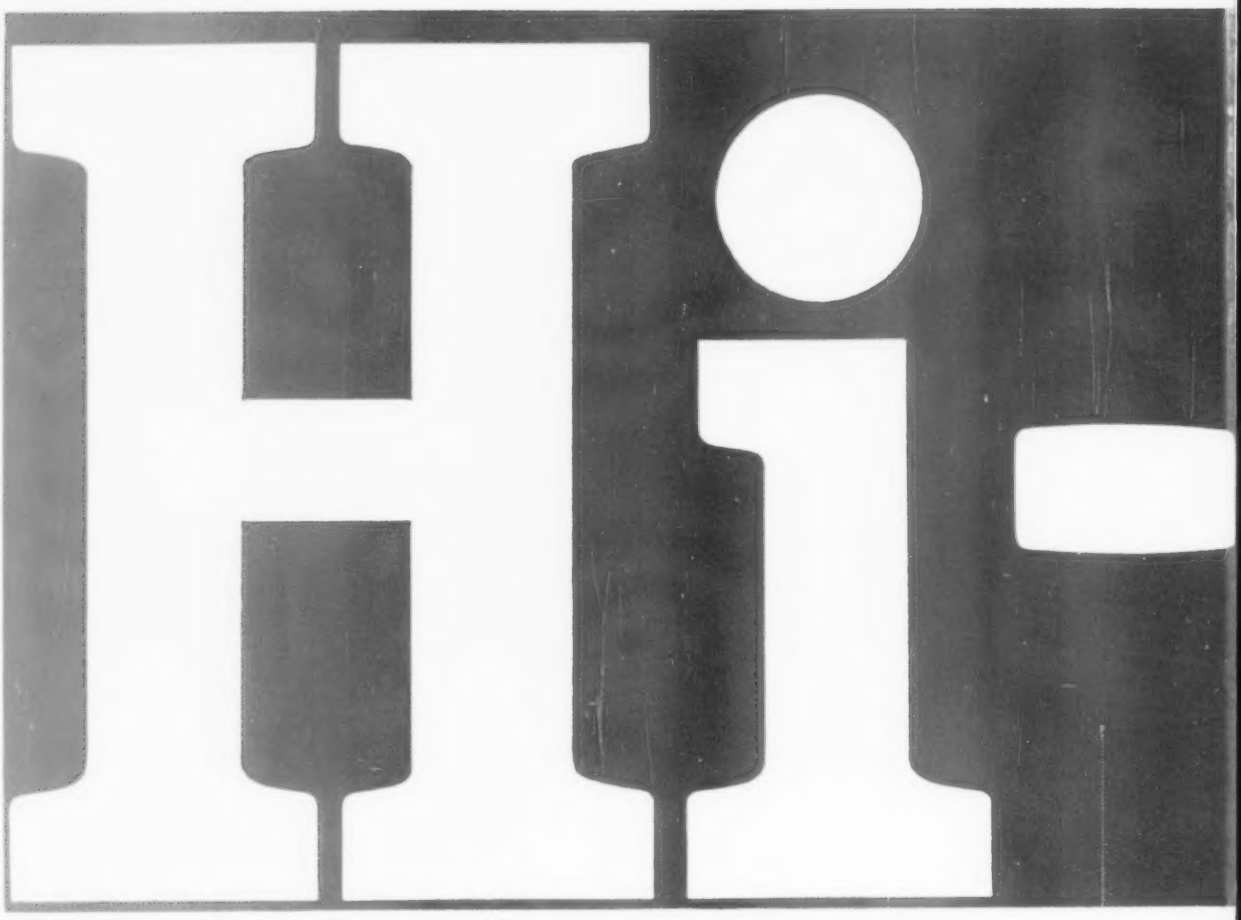

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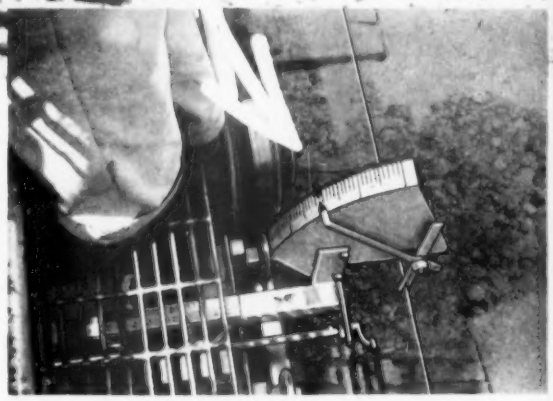
Operator stops Trakliner at joints, centers and quarters to move track to correct position. At each of these points the track is moved in either direction, as required, to bring the indicator pointer to zero.

Quick, lower cost lining of curves and tangent track is now possible with the Nordberg *Line Indicator*. Using the well-known Trakliner® as a central unit, this new "Mechanical Muscle" does the complete job of sighting and lining track.

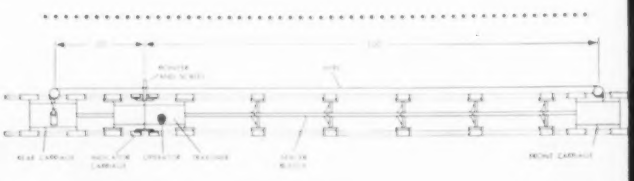
Sighting is accomplished with a 120-ft. length of wire. This wire is mounted on a moving assembly consisting of two 4-wheeled buggies which are maintained at proper distance from the Trakliner by lengths of tubing. One of the buggies is located 100′ ahead of the Trakliner and the other 20′ behind it. An indicator, mounted on a small carriage, is placed directly beneath the Trakliner in full view of the operator. If the track is out of line in relation to the reference wire, the amount of deviation is shown by a pointer on the indicator. The Trakliner then makes the correction.

Under average conditions, the Nordberg *Line Indicator* and Trakliner will line a rail length of tangent track in two minutes or less. In lining curves, two "passes" around the curve are made. The first, to obtain original "ordinates" and the second, to line to the desired final ordinates. A recently ballasted, one-degree curve, 4900 feet long, was lined by this method in only four hours.

A Trakliner operator and a man to adjust the pointer scale are all the crew that is required . . . together they can easily remove the light-weight buggies and tubular sections, as well as the Trakliner, from the track.



The single strand of wire used in the "Line Indicator" is carried in a fixed position and passes through the indicator at the Trakliner as shown above. If the track is out of line, the amount of deviation is shown by the pointer. Prior to lining, the reference wire is accurately adjusted so it is equally distant from the gage side of the line rail at the front and rear buggies, and at the pointer carriage. *Note arrangement of unit in diagram below.*



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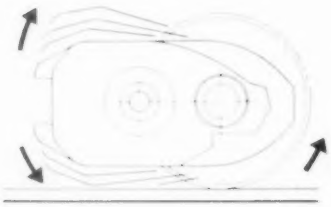

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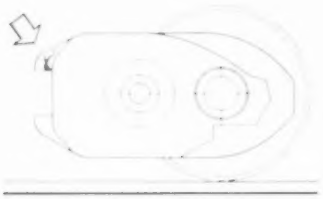
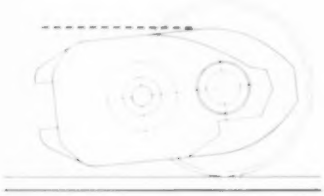
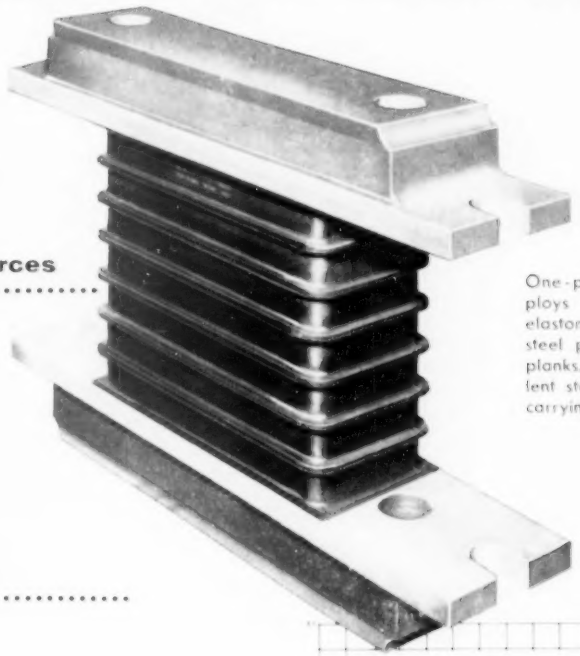


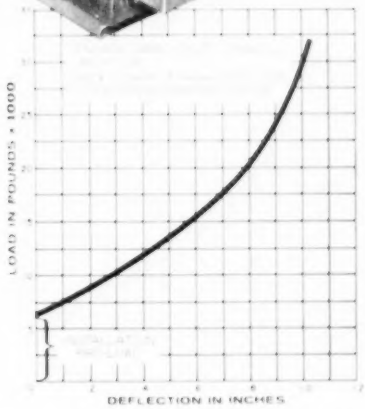
end motor nose lug failure



assure non-sagging support



One-piece construction employs specially compounded elastomer bonded to multiple steel plates and two spring planks. Design provides excellent stability and high load-carrying capacity.



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By GUS WELTY
Associate Editor

The danger in 1959 is that extreme demands may make any compromise a surrender. Even now, the labor-management atmosphere is charged. And the issues are fundamental: labor's demand for financial gain and job security vs management's fight for the right to manage economically and efficiently. No easy year lies ahead.

Labor: A Troubled Year Ahead

Two wounded giants meet across the bargaining table in major negotiations this year for the first time since 1956-57. Settlements won't come quickly—and they won't come easily.

Railway management must still obey working rules which, by 1959 standards, are primitive. Wage costs still eat up about 50 cents out of every revenue dollar. Full recovery from the 1957-58 business recession is still not here. Management is hurt.

Railway labor has lost jobs in every craft, on every property. More of the same lies ahead, as mechanization is expanded, as management's productivity studies turn up more ways to streamline operations and cut costs. Labor is also hurt.

Brotherhood strategy for 1959 seems fairly well outlined:

Pressure will be applied first for a legislative program. Then, probably in April and May, notices will be served and the brotherhoods' full contract demands will be made known well in advance of the Nov. 1 expiration of the present wage-rules moratorium.

In the meantime, management can look forward to a continuing rattling of sabres by the Railway Labor Executives' Association (through its newly expanded public relations office). Even now, with bargaining sessions months away, the RLEA is on record with a series of bitter indictments of management—indictments and a warning.

The industry, RLEA Chairman George E. Leighty charged recently, "is probably more mismanaged today than ever before in its history. The public interest, as well as the railroad workers' interest, is again being sacrificed by the bankers and financial manipulators who control the railroads on their altar of greed . . . I want to remind the railroad management officials who have adopted this irresponsible course that while railway labor is patient, its memory is not short. An accounting is surely coming—both to organized railway labor and the American people—for rail management's misdeeds."

Labor's Demands in '59

Thus far, the RLEA has announced only a legislative program. The brotherhoods individually have said little publicly on how much they'll shoot for this year. Both the legislative program and the activity of union chiefs in 1958, however, point to certain areas in which stiff union demands can be expected.

On the legislative front, RLEA wants:

- Major improvements in the Railroad Retirement Act and the Railroad Unemployment Insurance Act.
- Legislation "to protect the traveling public and railroad workers from the increased hazards of railroad travel which have resulted from the failure of most railroads . . . to observe safety regulations and properly maintain track, equipment and facilities."
- Amendment of the Transportation Act of 1958 to revise the new procedure in effect in passenger train-off cases. Both this and the safety-maintenance legislative push have strong employment stabilization overtones.

Union activity last year points in a similar direction:

- Various organizations—Maintenance of Way Employees and Telegraphers principally—have kept up the pressure for negotiations on stabilization of employment. In one or a number of forms, this is a safe bet to be included in the non-ops' new demands.
- Money demands, covering both wages and fringe benefits (such as a sick leave rule), will probably come high. Management will be in a two-way squeeze in the event the unions win increased retirement and unemployment benefits from the Congress. Demands won't reflect any consideration of the effects of the recession on the industry. Canadian Pacific and Canadian National discovered this in 1958.

This vise—demands for financial gains on the one hand, demands for stabilization of employment on the other—is a major factor in predictions that settlement may be a long, bitter process.

Of the two issues, employment stabilization looks to be by far the more complex. Railway employment, which totaled 984,784 in 1957, sagged to 831,117 by last November. Such losses would be serious if they involved a big, horizontal labor organization. To some 23 smaller, highly departmentalized unions, they're more than just serious. They could be critical.

It's significant that railway union chiefs have stepped up talk of merger and inter-union cooperation this year. H. E. Gilbert, president of the Brotherhood of Locomotive Firemen & Enginemen, is strongly urging amalgamation with the Brotherhood of Locomotive Engineers, although the BLE leadership seems to want no part of such a combination. (It will come as no surprise in some railroad circles if the Engineers come up with some form of proposal to run without firemen, perhaps for premium pay. Some recruiting of firemen for BLE membership, it's reported, is using a variation of this pitch.)

The Brotherhood of Railroad Trainmen sent a consolidation proposal to

(Continued on page 28)

The Engineer's Field Report

CASE HISTORY

PRODUCT Chevron Starting Fluid

FIRM Great Northern Railway Havre, Montana

Special fluid starts 250-ton crane instantly, saves time in emergencies—even at 50° below

GREAT NORTHERN RAILWAY'S 250-TON, RAILROAD CRANE (above) starts instantly with Chevron Starting Fluid in temperatures ranging to 50° below zero—even after standing idle for months at a time. Former steam-powered wrecker equipment took crew 12 hours to start. This crane with its two 174 h.p. Cummins diesel engines is now available for derailment emergencies on short notice.

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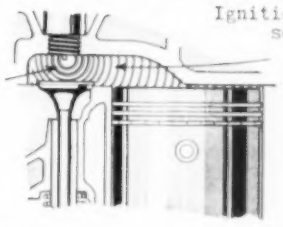

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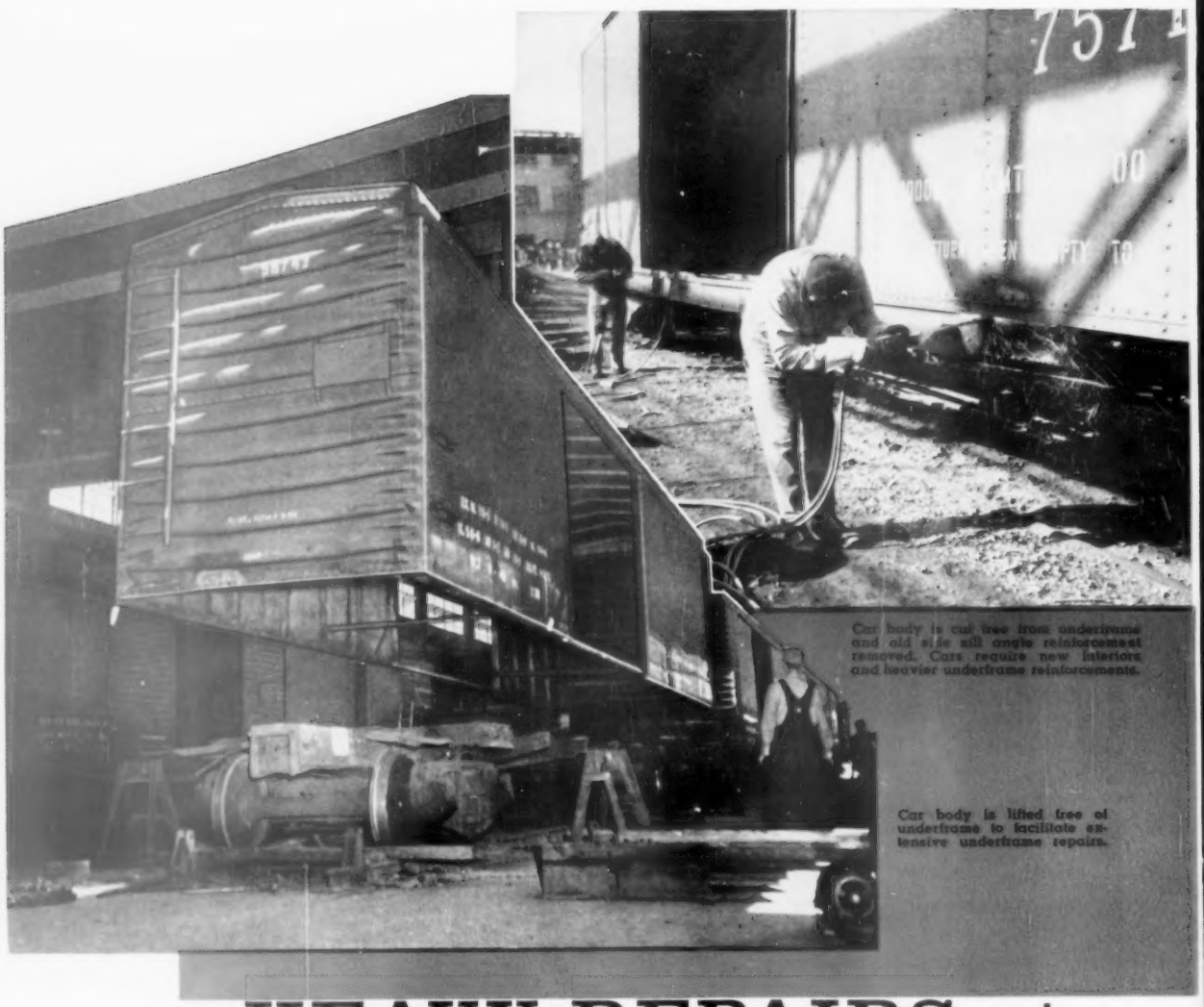
THE CALIFORNIA COMPANY, Denver 1, Colorado



Car body is cut free from underframe and old side sill angle reinforcement removed. Cars require new interiors and heavier underframe reinforcements.

Car body is lifted free of underframe to facilitate extensive underframe repairs.

HEAVY REPAIRS at GREENVILLE

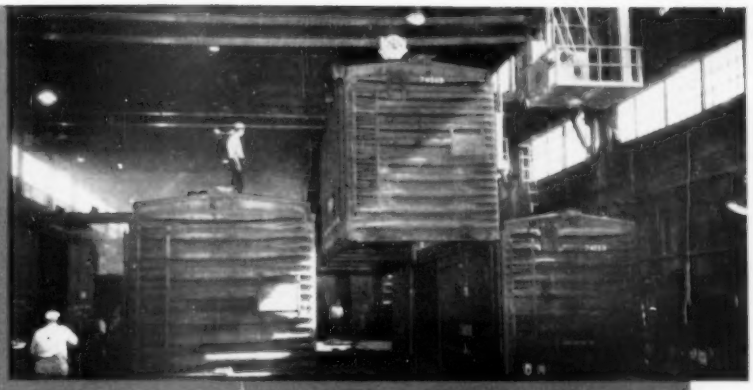
Upgrade Cars for Select Loading . . .

THE GREENVILLE STEEL CAR

These 50' 6" boxcars are now back in revenue service with reinforced underframes, new floors and loading devices. The pictures highlight the Greenville assembly-line techniques employed. They're different . . . perhaps the first of their kind.

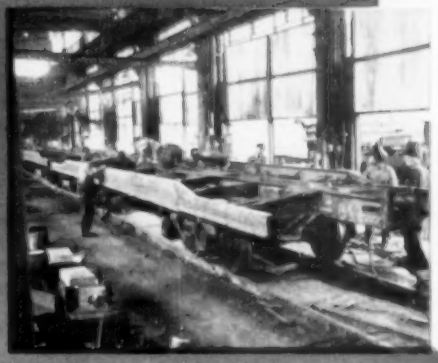
As carloadings increase, you'll want your cars on the job earning dollars. Greenville can do the heavy repair jobs and keep your shops free for running repairs. Put Greenville to work planning and scheduling your needed heavy repairs . . . getting your car fleet ready to roll. Now's the time to get started. A single phone call clears the track.

Car body ends straightened hydraulically.



Bodies are stored in shop area and are replaced on original underframe and trucks.

Underframe is clamped to special jig, straightened, bolsters leveled and necessary repair welds made.



Underframe on assembly line upside down to complete riveting and inspection. Note addition of new 15" channel side sill reinforcement full length of car.

Down-hand welds secure body to underframe.

New floor, end lining and loading devices installed.

Completely repainted and ready for stenciling, the cars are on their way back to revenue service.

LABOR: A TROUBLED YEAR

(Continued from page 24)

the 1958 convention of the Order of Railway Conductors & Brakemen. The BLE, the ORC&B and the Switchmen's Union of North America have agreed to cooperate in a 1959 wage movement. And of course the non-ops can be counted on to band together as they have in the past.

Outside their own fraternity, labor leaders have gone to the National Mediation Board and to various state and federal courts in their fight to preserve jobs. Presidents of four non-op unions late last year got to the NMB with stabilization demands which the carriers contend are unbargainable under terms of the existing moratorium.

The ORT and the Chicago & North Western went through mediation procedures and on into federal court in a job security hassle. The Telegraphers' demand (also served on other roads in addition to C&NW): that "no position in existence on Dec. 3, 1957, will be abolished or discontinued except by agreement between the Carrier and the Organization." Management, in effect, would be free to decide how many men it needed to perform a given job—subject to union approval.

RLEA Chairman Leighty—who also serves as president of the ORT—said he "wouldn't be surprised" if such a demand should be served on a widespread basis. He labeled as a "possibility" some form of demand for a separation pay plan. This, he said, "would help cushion the blow [for displaced employees] . . . but what we're interested in is for the railroads to remain in the transportation business. We want business for the railroads and employment for our people."

The Industry Side

Labor is indicating publicly that it expects management to "throw the book" this year in a major effort to win changes in working rules. Management hasn't given any such indication.

There are, however, factors pointing to 1959 as a fairly promising year for negotiating rules revisions. Although Mr. Leighty thinks the railroads "overplayed their hand" in 1958, the industry did succeed in whipping up a tremendous ground-swell of sympathetic opinion from the press, the public and finally the Congress. That opinion might conceivably be maintained through an open discussion of railway labor problems.

Moreover, and for what it's worth, the railroads have theoretical precedent for gradually easing the firemen out of service. The BLF&E's Mr. Gilbert warns that his union will not permit what happened in Canada (on Canadian Pacific) to happen in the U. S. But the Canadian case provided a third-party opinion that the fireman is, in fact, an unnecessary employee in present-day railroad freight and yard service. To paraphrase a U. S. railroad president: If the fireman is unnecessary on CPR, can he be necessary down here?

Station Agency Cuts

Other employees, found by various roads to be unnecessary and unproductive, have already felt the axe. Midwestern carriers—notably the North Western, the Minneapolis & St. Louis and the Rock Island—have won state regulatory commission authority for sweeping revisions in station agency operations. Little agencies (doing little business in little towns) have been dualized or consolidated with other agencies, or even closed in cases where the carrier and the brotherhood can't agree. The Telegraphers have fought back—with court actions, with demands like the job-freeze served on C&NW.

Working Rules

But the union hasn't been able to do more than delay the inevitable—because, as the Iowa Commerce Commission reported recently, station consolidation will work, will provide the public with service equal to that provided by many small one-man agencies previously operated.

Despite all this, however, there isn't any real optimism that 1959 will see drastic changes in the rules. Despite the savings of perhaps $500,000,000 which could be made by cutting off the fireman, changing the basis for payment of train crews, revising crew consists, changing terminal operations and combining yard and road assignments, there doesn't seem to be much visible hope that significant gains will be made this year.

Those rules changes eventually bargained for may be relatively minor, may involve primarily rules made as wartime concessions under conditions which no longer exist.

This picture could conceivably be changed, through no particular action by either the railroads or the brotherhoods. Five major airline strikes—two of them during the Christmas holidays—have started legislators thinking about revisions in the Railway Labor Act which would prevent such transportation tieups. One proposal: To make fact-finding board conclusions binding on both management and labor. Neither the mediation board nor an emergency board can do more than recommend settlement terms under present law.

Legislation in that direction might improve chances for updating outmoded working rules. But the RLEA, not eager to tamper with existing law, can be counted on to oppose that.

More will be heard this year of an opinion handed down last Nov. 21 by Judge O. L. Long in Bibb Superior Court, Macon, Ga. The opinion, in brief, challenges the constitutionality of the union shop amendment to the Railway Labor Act.

Unions in Politics?

If the Georgia Supreme Court upholds the ruling, as expected, the case will undoubtedly go to the U.S. Supreme Court for a final ruling. And the high court will have, for the first time, opportunity to rule on an issue passed over the last time the union shop was up for review: Can a person be compelled to pay dues, initiation fees and assessments to a labor organization, when part of the money so paid is used for purposes other than collective bargaining?

Judge Long had this to say, in part:

"I find that a part of the dues and assessments are used for the support of political organizations working in support of candidates for state and federal offices, and also for principles and doctrines which the plaintiffs and the class they represent do not care to support. . .

"The stipulation of facts and the evidence in this case show that the union contracts, under the Railway Labor Act, are simply devices by which the property of the plaintiffs, and the class they represent, is extorted or extracted from them and is being perverted for purposes other than collective bargaining, and the Railway Labor Act to this extent is therefore unconstitutional. . ."

The Outlook

Many doubt that negotiations will run their course (through 1959 and into 1960) without a strike. Labor is working up a full head of steam for its demands. Management can't afford to concede too much unless it gets something in return—which isn't likely.

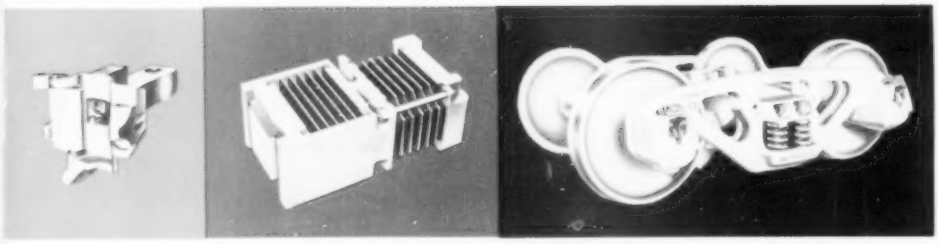
Deadlock could easily result if union chiefs tie a sizeable dollar package to a strict job stabilization proposal and the railroads contend they can't afford either (unless productivity increases are made a part of the package).

That productivity factor, one rail-

(Continued on page 126)

ANNUAL REPORT

to the Railroads



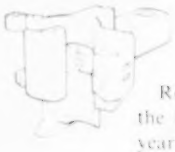
NATIONAL
MALLEABLE AND STEEL
CASTINGS COMPANY
CLEVELAND 6, OHIO

1959 BEGINNING OUR 91ST YEAR OF SERVICE TO THE TRANSPORTATION INDUSTRY

A KEY TO SUCCESSFUL RAILROADING...

NATIONAL RESEARCH

Two 1,000,000 volt X-ray machines, one at the Sharon, Pennsylvania plant, and one at the Chicago plant, play a vital part in checking the continuing quality of our many different railroad specialties.

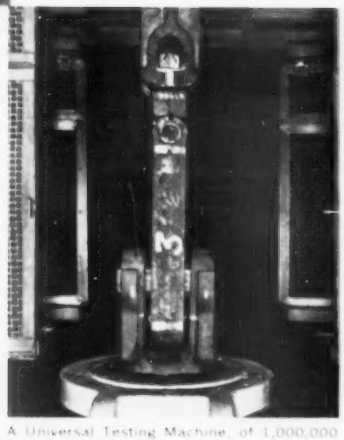


Research has long been recognized at National as providing the key to maintaining product leadership. During this past year National's Technical Center has applied its unmatched facilities to many important projects.

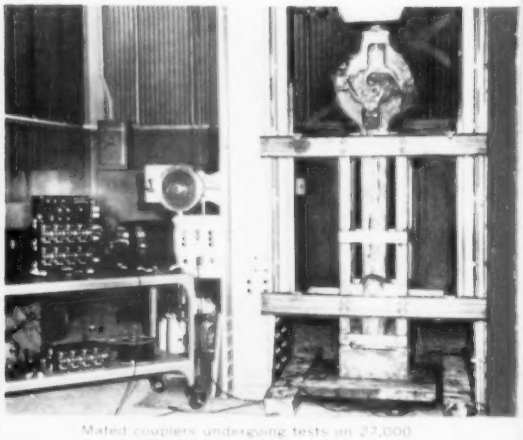
Among these are testing of several new ideas in draft gears which are in the prototype stage . . . development of entirely new concepts in car cushioning . . . product development and improvement in couplers, yokes, trucks and many other railroad specialties.

Research at National's Technical Center is not confined solely to products in National's immediate field. Indeed, many railroads and other industries rely on the facilities of the Technical Center for scientific investigations, particularly where various stresses and strains are involved in the use of the end product.

AA-9550



A Universal Testing Machine, of 1,000,000 pound capacity in either tension or compression, is used for testing yokes.



Mated couplers undergoing tests on 27,000 pound AAR Drop Test Machine. Note complete electronic instrumentation at left to record stresses in couplers.

KEYS TO SUCCESSFUL RAILROADING...

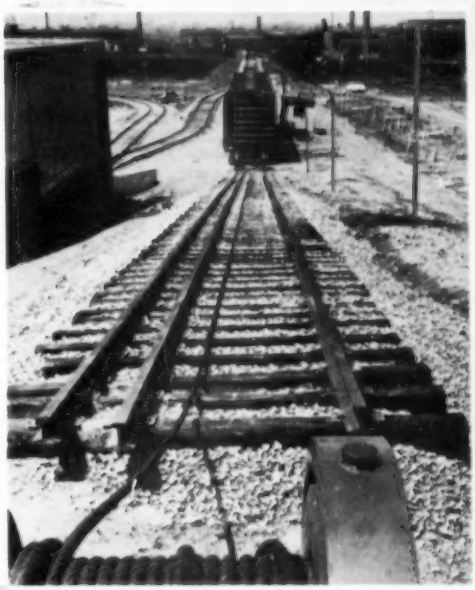
NATIONAL

PRODUCT IMPROVEMENT AND SERVICE

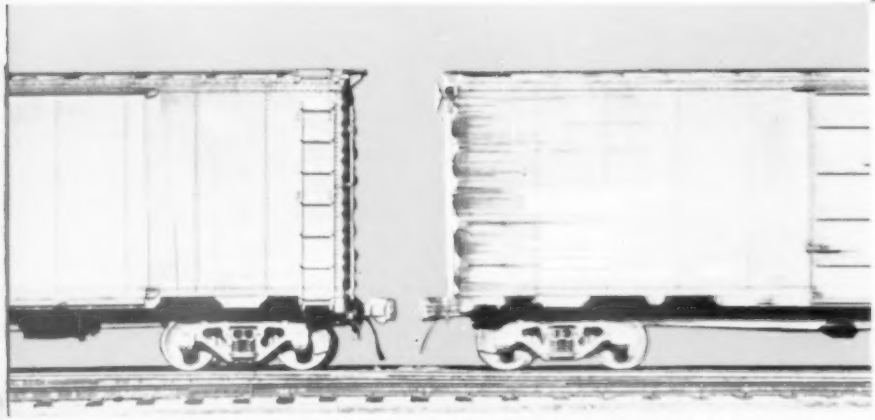
During 1958 National conducted an intensive program of evaluation and analysis on products of its own manufacture as well as those produced by other manufacturers. This program embraced technical investigation, testing, design change and retesting. This continuing evaluation program maintains National's product quality.

National correlates laboratory data, actual service records and road tests with data obtained from the Technical Center's Impact Test Tracks. In addition, National's completely instrumented test cars traveling in regular train service provide valuable information leading to improved draft gears, couplers and trucks.

Customer Service is a vitally important area of National's leadership. During 1958 nearly 1000 inquiries from over 100 railroads and suppliers were processed by the Technical Services Department. Each was handled individually and many resulted in field investigations or trips to the customers' lines or shops.



Each year many railroads, car builders or suppliers use the Impact Test Tracks of National's Technical Center for testing cars or component parts.



Results of scientific impact testing with electronic and mechanical instrumentation have resulted in important improvements in draft gears, couplers, design of car ends, underframes and car doors.

KEYS TO SUCCESSFUL RAILROADING...

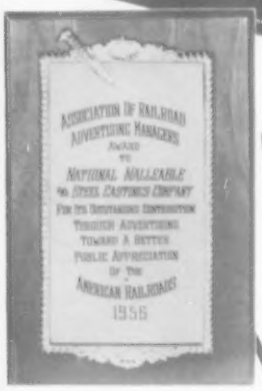
NATIONAL

SERVICE AIDS AND RAILROAD PROMOTION

Coupler Assembly Charts are available for Types E, F and H couplers. A new illustrated Coupler Parts Catalog shows photograph of part, part name, part number and approximate weight.

IQ (Impact Quantum) Slide Graph makes it a simple matter to figure total work done in foot pounds during car impacts without laborious calculations.

Booklet titled "Series Impacts" graphically illustrates impact forces encountered when one car is switched in to a string of standing cars.



National's series of advertisements promoting the use of railroad service, appearing in leading trade publications, has been awarded the coveted golden spike by the Association of Railroad Advertising Managers.

The Railroads are Moving Ahead—with

NATIONAL SPECIALTIES AND SERVICES

Established 1868

NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY

COUPLERS • YOKES • DRAFT GEARS • FREIGHT TRUCKS • JOURNAL BOXES

Railway Division Headquarters
Cleveland 6, Ohio

International Division Headquarters
Cleveland 6, Ohio

CANADIAN SUBSIDIARY
National Malleable and Steel Castings Company of Canada, Ltd. • Toronto 1, Ontario

By J. W. MILLIKEN
Director of Research

Railroad purchases of materials, supplies and fuel in 1959 will rise 40-50 percent above the 1958 level of approximately $1.2 billion. Freight-car orders, especially during the latter part of the year, will hit a brisk pace, and probably will total at least 50,000. The practice of leasing equipment will expand.

Purchases May Reach $1.8 Billion

Railroad purchases of materials, supplies and fuel during 1959 should amount to about $1.7 or $1.8 billion. This would be a substantial increase from the 1958 figure of approximately $1.2 billion.

During the recession railroads reduced their inventories substantially. Especially large reductions were made in reserve stocks of fuel, and materials and supplies used for maintaining rolling stock. Fuel, of course, will be needed to handle the expected traffic increases.

Bad-Orders Must Be Cut

The traffic increases will also make it necessary to reduce substantially, through repairs, the number of freight cars in bad-order condition. Indications are that there will be no substantial increase in installations of ties and rail during 1959.

In the capital expenditures field, the outlook for freight car and locomotive orders, CTC installation, purchases (or leasing) of maintenance-of-way work equipment is good. Last September, it was estimated that railroads would come up with a "mild flurry" of car orders late in 1958 and would order between 50 and 60 thousand freight cars during 1959. The first part of that prediction has come true. The second part remains to be proven, but Railway Age sees no reason to change the estimate.

Orders for rebuilding locomotives, or for new locomotives to replace older ones now in service may run as high as 900.

Twenty-two roads have indicated that they will install next year some 973 miles of CTC. Thus, with many signaling budgets still to be set up and approved, it looks as if 1959 will be a fair year in this department. It seems certain, too, that 1959 communications budgets also will be up somewhat from 1958 levels.

In all probability, most activity in the capital expenditures field will take place during the latter half of the year. The possibility of a steel strike about the first of July is making most railroaders a little watchful—and willing to wait a bit to see how things go before committing themselves to any big-ticket capital expenses.

Therefore, as far as the railroads' own capital spending in 1959 goes, it is not likely to exceed by much—if at all—the $700 million 1958 figure. Should the steel strike materialize and last for any substantial length of time, capital spending might well drop below this figure.

Role of Price Increases

Price increases will play some part, even though a relatively minor one, in the 1959 increase in railroad purchases. From mid-year 1957 until mid-1958, prices paid for fuel, material and supplies did decline. (See table.) But, by the beginning of the fourth quarter of last year they had started upward again, just about the time that purchases generally were beginning to start their climb.

The railroads' rate of purchasing declined month by month during 1958 until September, when a decided upswing began. This followed a substantial increase in car-repair activity. During July and August, purchases were running to a level just above $90 million per month. In September the rate increased to almost $100 million, while in October the figure was pushing $110 million.

By the end of the first quarter of this year, $135 million or more per month should be reached.

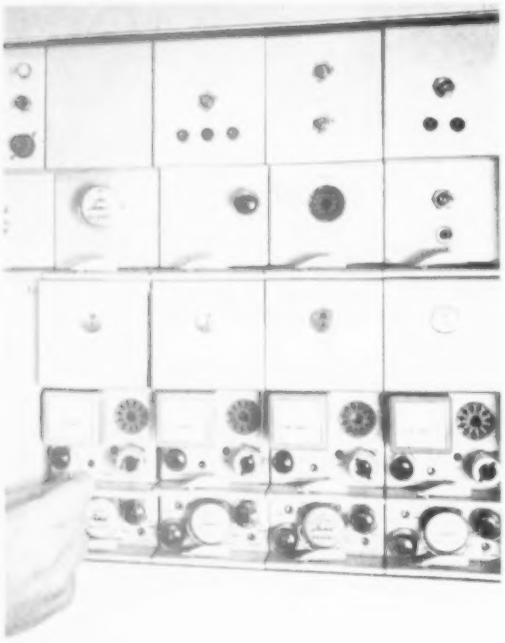
QUARTERLY INDEXES OF SPOT PRICES OF RAILROAD FUEL, MATERIAL AND SUPPLIES*

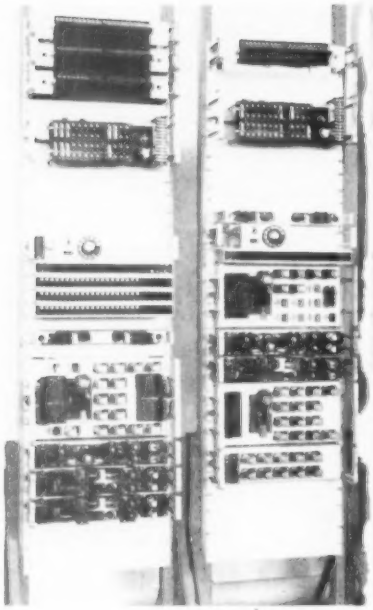
(Average mid-year 1947-1949 = 100)

UNITED STATES	July 1957	Oct. 1957	Jan. 1958	April 1958	July 1958	Oct. 1958
Fuel (coal & oil)	127.5	123.5	121.4	115.8	112.7	116.8
Forest products	131.4	129.9	128.0	128.7	126.2	127.4
Iron & steel products	183.5	185.7	185.6	185.6	185.6	191.1
Miscellaneous products	135.5	134.5	134.0	133.5	133.1	133.6
Total, excl. Fuel	154.1	154.2	153.6	153.5	152.9	155.4
Total, incl. Fuel	144.0	142.9	141.9	139.9	138.7	141.6

*Source: Bureau of Railway Economics, Assn. of American Railroads

Lenkurt adds a new communications





Complete 4-channel terminal assembly of Lenkurt Type 45C Carrier. By the use of different "plug-in" subassemblies, each channel can be adapted for different frequency levels, signaling options and voice-frequency terminations. Plug-in compandor on each channel permits use of many lines otherwise unsuited for high-frequency carrier transmission. May be expanded by addition of "plug-in" units.

Lenkurt 74A "Microtel" microwave terminal, designed for the high-quality transmission of up to 240 channels of telephone, telegraph, telemetering, supervisory and remote control information in the 6000-mc. band. Provides system length up to 300 miles with medium loading and multiple repeater points. With use of r-f circulator, 2, 3 or 4 terminals can be added to the same antenna system.

Lenkurt 51B Supervision and Control System can be linked to any radio or wire-line network to provide 20 control functions and 20 supervision functions at 4 remote locations, with complete supervisory control centered at one point. It has provisions for supervision of up to 80 change of status indications and the control of up to 80 external functional circuits. Each bay is a complete package in itself.

dimension to railroad and control

"Building-Block" Carrier and Microwave Units Permit Automation Now... Expansion Later

Railroad men who have taken a good look up the track can see more automation ahead. This will demand equipment having greater circuit capacity with toll-quality standards. Lenkurt has it *now!*

Whatever your plans may be — more communication channels, high-speed data transmission or complete automation—the Lenkurt equipment you install *today* will handle the job *tomorrow*. For instance:

Lenkurt 45-Class Carrier: Applicable to open-wire, cable or microwave, it provides direct interconnection at carrier frequencies—can cut system costs as much as 50%. "Building-block" plug-in units simplify installation and maintenance—permit quick, easy expansion.

Lenkurt 74A Microtel: New 6000-mc. microwave equipment for communication and control without additional line construction. Can be directly tied in with present carrier system.

Lenkurt 51B Control Equipment: Can be added to current Lenkurt equipment to provide remote supervisory control, telemetering, dial signaling and high-speed data transmission.

When you buy Lenkurt, *you own the system.* The complete package—tailored to your needs—is custom engineered, installed as *one* integrated system, by *one* team of *specialists.* And Automatic's "follow-thru" engineering and maintenance service *is yours for the life of the equipment.*

Want more facts? Call your Automatic Electric representative — or mail the coupon today for brochures covering complete system setups.

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Automatic Electric Sales Corporation • Northlake, Illinois ***(Attention: H. N. Inwood)***

Please send literature on:

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In Canada: Automatic Electric Sales (Canada) Ltd., 185 Bartley Drive, Toronto 16, Ontario

TropicAire-Coldmobile DIESEL-POWERED Trailer Refrigeration means

CLEAR TRACK

for refrigerated TOFC ladings

Refrigerated TOFC ladings require first-class handling to assure prompt, intact delivery. Yet speed, superior traffic management and eggshell treatment can't prevent spoilage... when refrigeration equipment is inadequate or undependable.

TropicAire-Coldmobile diesel refrigeration provides the four factors essential to superior TOFC service: (1) *overload power*—to perform perfectly, even under extreme conditions. (2) *Dependability*—to operate long, hard hours without service or attention. (3) *Rugged roadability*—built to withstand the shocks and jolts of normal over-the-road or yards handling. (4) *Reversability*—to maintain exact cargo temperature, whether conditions call for heating or cooling, *automatically*.

For better refrigerated service, equip your TOFC trailer fleet with diesel-powered TropicAire-Coldmobile.* Call or write for detailed information.

TropicAire Coldmobile

FIRST . . . . IN PROVEN DIESEL-POWERED MOBILE REFRIGERATION!

MOBILE REFRIGERATION
AIR CONDITIONING

ANOTHER PRODUCT OF McGRAW EDISON

McGRAW EDISON COMPANY Tropic Aire Division 5201 W. 65th Street Chicago 38, Illinois

By R. M. SCHMIDL
Associate Editor

I predict that 1959 will see new and better training programs for P&S personnel, greater use of electronic data-processing for inventory control and related functions, and greater application of local-buying and blanket-ordering procedures. Standardization of equipment specifications on an industry-wide basis will increase.

P&S Officers 'Trim the Fat'

The recession year of '58 turned out to be one of mixed blessings for railroad purchasing and stores departments. Expenditures were, generally, cut to the bare minimum, forcing postponement of many badly needed improvements in purchases and stores operations as well as in railroad operations as a whole.

The economy squeeze did, however, produce some benefits. As the cash in the till dwindled on many roads, management and purchasing officers began to look more closely at their inventories. Wasteful practices were uncovered and eliminated. New and more efficient procedures were devised. Closer investigations were made of the advantages of electronic data processing and its application to inventory control.

In short, purchases and stores officers examined, reviewed and reappraised everything that costs a railroad money. Practices were revised wherever possible to cut costs.

One railroad president, speaking of purchasing and stores department activities in the year just past, phrased it this way: "Drastically reduced earnings dictated a 'training diet,' and we found there was much fat in our operation which could be trimmed away without weakening our ability to perform essential services . . . We are, in effect, in better 'fighting trim'."

Ask nearly any purchases and stores officer what his biggest concern was during the past year and the answer will be: Inventory control. Many roads had large sums of money tied up in "fat" inventories—money that could be, and often had to be, put to better use elsewhere on the railroad. Generally, however, there were no large scale, deliberate and ruthless cuts in inventories. Rather, better methods of control were inaugurated. The improved methods, developed during a recession period, promise to serve admirably during the days of better business which, all agree, are on the horizon.

As inventory reductions were ordered, purchasing men ceased to buy many materials and supplies of which they had an ample stock. Surplus items were disposed of either through established channels or by direct sale to other railroads. Simultaneously, economy dictated cutbacks in shop work. As shop production tapered off, demands upon inventory became less and less. With some items, however, the barrel bottom was reached and new materials had to be purchased.

The questions confronting the purchasing officer at this point were: Should I buy in large quantities and reap the savings of the quantity discount and less expensive per-unit handling and freight charges? Or should I buy just what we need right now, paying more on the smaller quantity basis but using up less cash? In seeking the answers, important new procedures were formulated.

Paperwork simplification became a must and efforts in this direction were intensified with increasing vigor. Whereas a railroad might formerly have processed dozens of forms—each of which carried a half dozen or more signatures to purchase a single item, such forms were combined and standardized to simplify handling and lower costs. In most cases, purchasing and stores departments cooperated with accounting departments to produce forms which could be incorporated into existing or contemplated electronic data-processing procedures.

To further ease the purchasing agent's cash-in-hand vs. cash-tied-up-in-inventory dilemma, some roads found it expedient to eliminate inventories of certain items. In some cases, materials were ordered delivered directly to the point of use in the quantities needed. On the stock record, such items were immediately charged out to the using departments without ever entering the storehouse.

Local buying also gained in popularity on many roads. Under this system, a station agent, for example, would not requisition light bulbs from the nearest storehouse (which might be a considerable distance away). He would, instead, go to the nearest hardware, or even the local drug store, and buy the bulbs with station account funds, or charge the purchase to the company's account.

By making suitable arrangements with local merchants for such transactions, many roads found it possible to eliminate the need for maintaining inventories of many commonly available items. This practice was found to have other advantages. In more than one case, railroads making such arrangements were assigned to carry the local merchants' carload and LCL freight for the first time.

Local buying was not unknown before 1958. Many roads, however, resorted to it only in cases of "emergency" when usual procedures took too long. The practice has limitations. It cannot, for example, be applied to all products, materials and supplies. Careful study must be made of each individual item under consideration for local purchase. For example, the agent cited above might pay 39¢ at a local

(Continued on page 126)

Special report to Caterpillar owners:

CAT CATERPILLAR

Parts you can trust. Dependable, round-the-clock service.

PROOF OF THE DIFFERENCE IN THE CAT "HI-ELECTRO" HARDENED CUTTING EDGE

Whether loading scrapers or bulldozing, the cutting edge takes more punishment than any other part of the machine—more punishment today than ever before. New, larger, more powerful machines put greater demands on cutting edges. And the edge that's holding up best and lasting the longest is the Cat "Hi-Electro" hardened cutting edge—the edge with the difference. From all over the country, documented results from on-the-job comparative tests with other makes of edges confirm this fact. The best buy is the Cat edge.

ROUGH JOBS like this put cutting edges to severe tests. And here is where tough Caterpillar edges prove their superiority.

• • •

Field tests prove that the edge with the difference, the Cat cutting edge, not only outwears other make edges of the same thickness; it even outlasts the thicker edges of other manufacturers. The reason: Caterpillar engineers perfected a hardening process to give steel the right blend of toughness and hardness—toughness to prevent breaking, hardness to prevent bending and rapid wear.

• • •

Quality edges start with quality steel, tested in Caterpillar's laboratories for the right chemical composition and physical characteristics. Only steels meeting these exact specifications are accepted, and further tests are made at every stage of production.

CROSS SECTION of edge showing armor-like case and its shock-absorbing core.

NOW AVAILABLE—NEW MULTI-SECTION 'DOZER EDGES

New multi-section 'dozer edges developed by Caterpillar for the D8 and D9 show the way to reduced blade costs and easier blade changing. Reduced blade costs can result from piece-by-piece replacement. You can now reverse and replace the worn sections. Changing is easier than ever before.

• • •

Service tip: When installing new or reversing "Hi-Electro" hardened edges, clean all dirt from the matching surfaces. Be sure that all bolt heads are properly drawn in to their holes and correct nut torque applied. This assures proper cutting edge support and maximum strength.

• • •

Your Caterpillar dealer has the complete story on the advantages of using new Cat multi-section 'dozer edges. Remember, he'll carry your parts inventory. See him today!

NEW EDGES are now available for the D8 Bulldozer in left and right sections shown here. New edges for the D9 come in left, center and right sections.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

CATERPILLAR

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By M. H. DICK
Engineering Editor

Some astounding new developments in track-maintenance machinery will make their appearance in 1959. A sharp spurt will take place in the use of continuous-welded rail. Heat-treated and alloy rail will come into wider use on curves and other points of hard usage. Property-maintenance programs on the whole will be substantially larger than in 1958, but will fall short of actual needs.

M/W Mechanization at New High

Nowhere in railroading are such momentous changes taking place as those that may be seen in the maintenance-of-way field.

These changes were present to a marked degree in 1958. Since they stem largely from the need for economy it is only to be expected that a period of recession would have a stimulating effect on them. What was seen in 1958, in other words, was a situation in which trends that had been under way for some time were accentuated by business conditions.

Like crosstie and rail renewals of all Class I railroads have provided the close of World War II each of these indices of activity started a decline (see charts) that has continued with only minor interruptions to the present. By 1957 these trends had brought tie renewals to the level of 21.2 million, the lowest in history. Rail renewals in that year approximated 762,880 net tons, likewise a new low.

New Low Records

Hardly anyone will be surprised to learn that these low records did not remain unbroken in 1958. Practically all Class I railroads have provided Railway Age with figures showing the amounts of new crossties and rail they inserted in track for replacement purposes last year. With these figures as a basis it is estimated that the Class I roads installed 18 million new wood crossties and 678,880 net tons of new rail for replacement in 1958.

What has been happening to rail and crosstie renewals over a period of time reflects, at least in part, the efforts of the railroads to counteract the effects of increasing wage rates. These efforts include means of prolonging the life of ties by protecting them from mechanical wear through the use of larger tie plates, tie pads and other measures. Similarly, the life of rail is being extended by end hardening, out-of-face grinding and the use of low-alloy and heat-treated rail on curves.

When seeking an explanation of the declines in material usage that have occurred, consideration must also be given to the effect of the long cyclical swings that characterize renewal curves. This applies especially to crossties. There is reason to believe, for example, that the railroads may still be benefiting from the heavy insertions of treated ties that were made during and following the war.

However, even when full consideration is given to the means being used to extend tie and rail life and to cyclical factors, there is still plenty of reason for doubting that the full measure of wear and tear being exacted from the tracks by traffic and the elements is being restored by current renewal programs. Let's see, for example, what the averages say. For the five-year period ending with 1957, tie renewals of the Class I roads averaged 74.2 per mile. This implies an average service life of 40.7 years. For the 10-year period ending with the same year, tie renewals averaged 84.3 per mile, indicating an average service life of 35.8 years.

Few, if any, maintenance men will claim they are getting as much service life from their ties as is indicated by these figures. Nor will they claim that current rail-renewal programs on the whole are adequate. In fact, there is growing concern in responsible quarters that more is being taken out of the track structure than is being put into it.

Larger Programs for 1959

With prospects for business showing definite improvement, what are the railroads planning for 1959 in the way of rail and tie programs? Estimates based on figures furnished by most of the Class I roads indicate that these roads as a whole are planning to install about 18.7 million new crossties this year. Their new rail programs call for laying an estimated 583,440 net tons of rail. Thus, both categories will show increases over 1958, but will fall considerably short of the work done in 1957 and previous years.

In keeping with the decline in the actual amount of work done last year, the total expenditures of Class I railroads for maintenance of way and structures decreased to approximately $1,242 million in 1958 from $1,430 million in 1957. Prospects for 1959 are that total M/W expenditures will be about the same as they were in 1957. The railroads won't do quite as much work as they did in the latter year but they'll have to pay more for what they do because of higher wages.

Largest in History

Never before was maintenance-of-way and structures work so highly mechanized as it was last year. At their command for carrying out the smaller work programs the railroads collectively had the largest work equipment fleet in history.

What types of equipment did the railroads buy last year? This information is given in the table which shows the actual purchases as reported to this

magazine. It will be noted that declines occurred in all categories except tie-renewal and communications equipment. However, it is significant that only slight to moderate declines took place in several other classifications, including bridge and building tools and equipment.

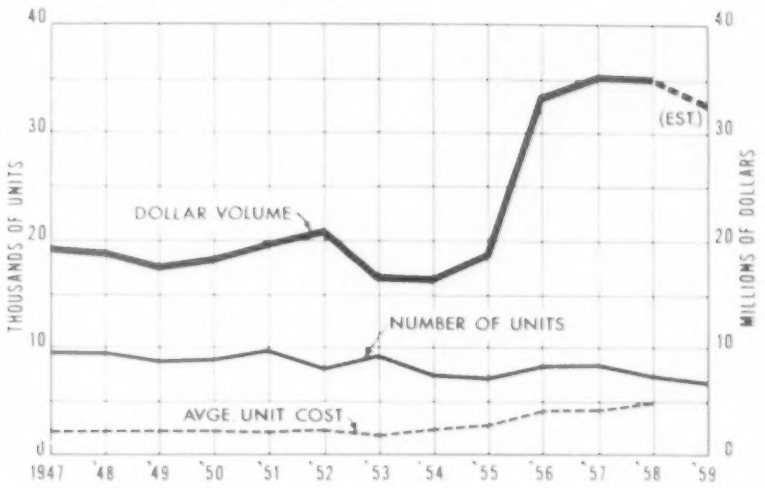
There is a story behind the relatively high rate of purchases of equipment in this category. It is a recognized fact that the mechanization of B&B work has not, in the past, kept pace with that in the track field. While the roads have for many years been acquiring power tools and equipment for use by their bridge and building forces little attempt was made until recently to develop equipment specially tailored to railroad needs. This is now being done.

One type now being offered by several manufacturers is a rubber-tired hoist equipped with retractable flanged wheels.

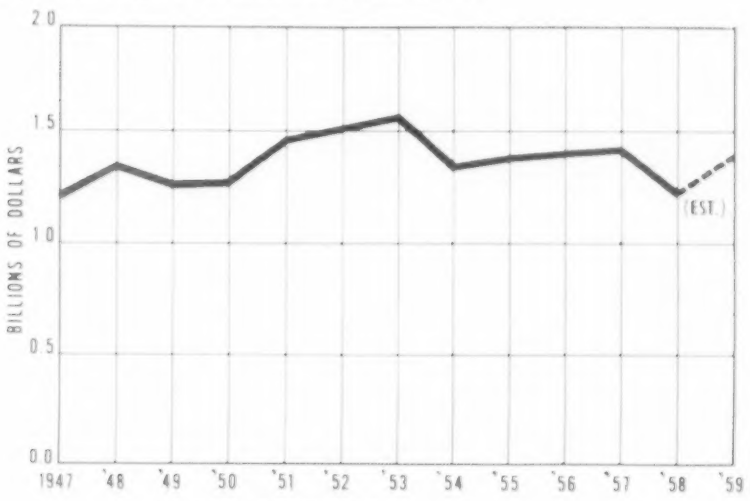
Another recent development is a complete outfit of hydraulic tools and jacks specially engineered for use in making repairs to timber railroad bridges. Also, in view of the high cost of painting by hand, both the railroads and manufacturers are showing great interest in the development of improved equipment for spraying paint and other protective coatings on bridges and buildings.

Meanwhile, rapid progress is being made toward more complete mechanization of the track forces. Equipment for renewing ties and surfacing track out-of-face is steadily being refined and perfected with the aim of getting more production per man-hour. With many roads now doing such work on a cycle basis they are showing increasing

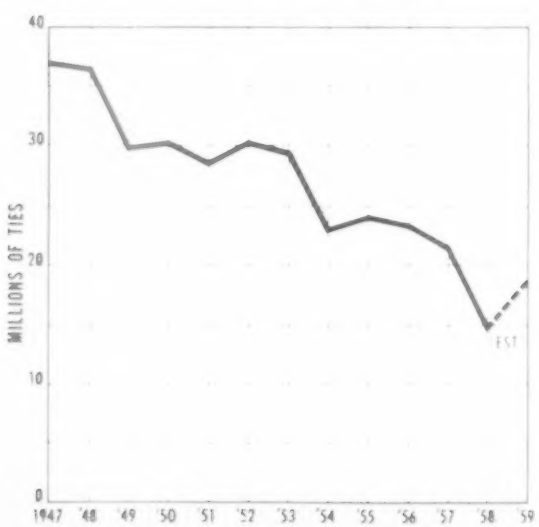
WORK EQUIPMENT PURCHASES



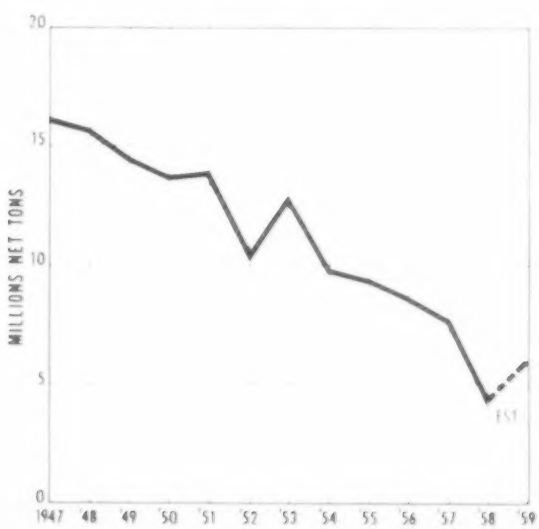
M/W EXPENDITURES—CLASS I RAILROADS



CROSSTIE RENEWALS



RAIL RENEWALS



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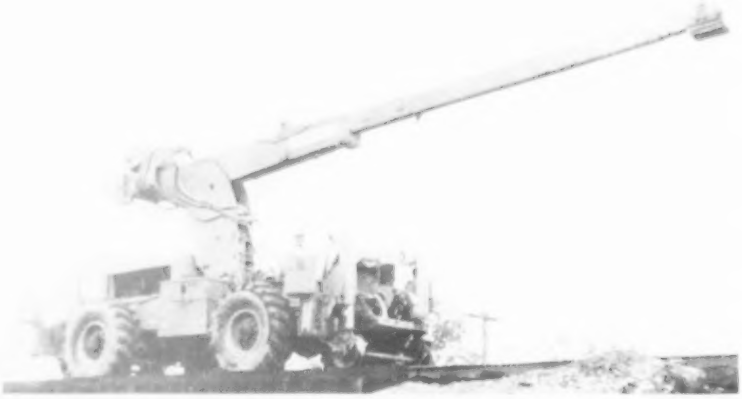
TIMBER STRINGER is handled by a Fairmont A40 Hy-Rail hoist operating on deck of trestle.



RENEWING heavy members of a ballast-deck bridge is the job in which this machine is engaged. It is an Austin-Western hydraulic hoist.

NEW STRINGERS are being inserted in a timber trestle on this job on the Rock Island. The machine is a truck-mounted Schield-Bantam hoist.

Unit Purchases of Work Equipment

	1955	1956	1957	1958
Ballasting equipment	786	853	790	678
B&B Tools and Equipment	453	540	440	436
Cranes	63	82	145	65
Grading equipment	228	325	365	190
Misc. track machines	680	798	480	342
Power plants	357	498	353	351
Rail-laying equipment	684	898	733	352
Tie-renewal equipment	137	360	176	224
Transportation, men & mat'l	3,070	3,293	4,147	3,269
Weed control equipment	149	157	212	158
Communications			129	148
Unclassified		390	421	295
Total units reported	6,607	8,194	8,392	6,508

(Continued from page 41)

interest in power spot tampers for keeping the track in good riding condition between out-of-face surfacings.

In view of the wide range of machines now available for maintenance-of-way and structures work, and the economies to be realized from their use, mechanization is being regarded more and more as an overall proposition. Instead of acquiring machines piecemeal many roads are planning the mechanization of their M W forces on a system-wide basis. Backed by comprehensive cost studies, engineering departments are experiencing marked success in getting management to authorize the necessary expenditures.

Will the railroads' purchases of M W machinery continue at their present high level? Figures obtained from the railroads regarding their plans for 1959 point to little, if any, let-up. A total of 72 roads provided information on their expected purchases of equipment this year. Of these, 33 roads expect to buy more equipment than they did in 1958, 34 expect to buy less and 5 indicate that their purchases will be about the same.

Those roads that plan to buy more machines spent a total of $3,930,077 for this purpose last year. This year they plan to spend $6,729,022. Those roads that plan to buy less spent $7,977,639 for machines in 1958. This year they expect to spend $4,254,784. These figures, prorated to cover the entire industry, indicated that a total of about $32.8 million will be spent for work equipment in 1959.

It is important to make the point that the actual purchases of maintenance-of-way machinery by no means tell the entire story. The reason is that an increasing amount of such equipment is being acquired under lease agreements.

In 1958 a total of about 1,000 units of equipment were operated under lease. In 1957 the comparable figure was somewhat more than 600 and in 1956 it was in the neighborhood of 200. These figures, it should be noted, must be added to the actual purchases previously mentioned to arrive at the total amount of work equipment being used by the railroads.

The need to produce savings is causing maintenance-of-way men to examine every possibility of reducing costs. Savings in labor through the use of machinery comprise only one of the means being used to achieve this end. Another is to reduce the amount of work required by various measures including the use of more durable materials. Interest in continuous welded rail continues to grow and extensive installations are planned by several roads in 1959.

By F. N. HOUSER, Jr.
Associate Editor

Freight car shortages can soon be a major problem if general industrial activity continues to increase. Railroads have generally been unable to repair, rebuild or build cars rapidly enough to avoid endangering their competitive position. However, serious financial problems have not stifled all progress. Improved designs, materials and specialty devices have proved to be increasingly popular, even during recession-ridden 1958. The trend in car designs is to units of greater capacity.

Better, Bigger Cars—But Fewer

If predictions for increased carloadings during 1959 prove accurate, railroads will soon be in trouble.

They will be in their traditional post-recession position of not having sufficient cars to handle the traffic offered them. The consequences of this were well summarized by a U. S. Steel traffic officer last summer when he warned car officers that "every time this happens, railroad competitors reap the harvest and keep the seed."

The car surplus has been dropping during the past six months. It went down from 134,452 cars in mid-May to 13,769 in mid-November. During most of this time, the bad order freight car ratio continued its climb. It had gone up every month from September, 1957, and finally peaked in October, 1958, at 8.4 per cent of the fleet.

By December 1, freight cars held out of service for repairs totalled 145,731, still an unhealthy 8.4 per cent of the total. Not since 1950 has the U. S. car fleet been in such poor condition.

At the same meeting at which he warned car officers about the impending "harvest," L. L. Adams, assistant to vice president—traffic, U. S. Steel, commented on this serious situation. "The steadily increasing percentage of bad order cars, as well as the number being offered to shippers which should be repaired or upgraded, foretells another period of serious car shortage and a loss of revenue to the railroads. Again, it is feared the railroads will be too late in getting repair facilities going and too late in ordering repair materials."

The Car Service Committee of the National Industrial Traffic League, at the League's recent meeting, reported "strong feeling that any upsurge in business will be accompanied by a car shortage of some magnitude." The League then adopted the Committee's recommendation that "the AAR be advised of League concern for the present poor condition of equipment evidenced by bad order statistics . . . and that AAR members take steps to anticipate business conditions" to insure adequate car supply.

New Regulations

In addition to the effects of recession on railroad car buying and repair programs, car department officers have been confronted with other new problems. New federal and state legislation and regulations bring government into new realms. In August, the Train Brake Act of 1958 became effective. The Act already has required changes in some roads' operating procedures to comply with its inspection provisions.

Revision of the U. S. Safety Appliance regulations, pending for several years, made little progress in 1958. The General Committee of the AAR Mechanical Division reported last year that "there has been no recent activity regarding this matter." State laws requiring additional lighting and sanitary facilities on cabooses promise to make these cars more expensive to buy, maintain, and operate.

Even though 1958 was a year in which there could have been a minimum of development activity because of the railroads' poor financial condition, the railroads and their suppliers were active.

The perpetual war against freight loss and damage claims is being waged with several new "weapons." The first Santa Fe cars with the road's hydraulic "Shock Control" underframes are in service. A hydraulic draft gear, an arrangement for simultaneous loading of both draft gears in a car under buffing loads, and increasing numbers of 36-in. friction gears, are developments being watched with interest.

The present draft gear situation was summarized by the late N. T. Olsen, president of Peerless Equipment Company, as follows:

- "We will continue to use the standard 24"x-in. pocket gears for years to come obtaining protection up to 4 mph.
- "For higher payloads we will use the 36-in. gear obtaining protection up to 8 mph. *(Continued on page 132)*

with Fir Plywood boxcar lining

Missouri-Pacific reports Exterior plywood speeds work, saves 10 man hours per car

EXTERIOR FIR PLYWOOD car lining plays an important role in the big, fast-moving operation at Missouri-Pacific's construction yard at DeSoto, Missouri, where modern assembly line techniques can send a new boxcar into service every hour of the day.

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For Mo-Pac fir plywood has demonstrated its superiority in other ways, too. Interior surfaces are smooth, and the danger of infestation is minimized. Shippers like it because it's a clean (and easy-to-clean) lining that protects valuable ladings. Waterproof Exterior plywood is a strong, tough, rugged material capable of shrugging off blows that would split ordinary lumber.

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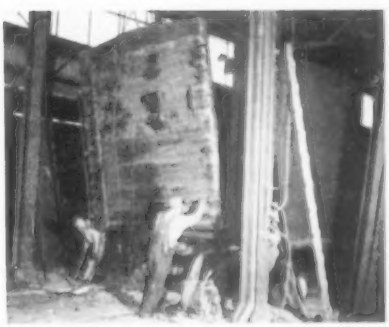

At their DeSoto shops, Mo-Pac does big things in a big way, fast. Specially developed high-speed assembly line technique sends 8 new boxcars into service every day.

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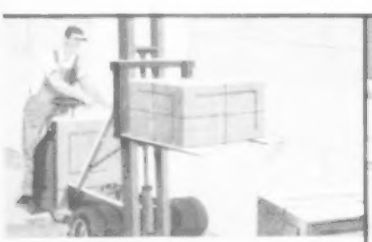

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By

J. W. MILLIKEN

Director of Research

I predict 1959 will see the railroads step up their freight rate and market research work. More proposals for incentive rates will be made, especially if the ICC approves several now before it. Carloadings should be up about 6-9% from 1958 levels, freight revenues 8-10%. Piggyback volume and revenues will climb. Interest in containers will increase.

Carloadings Due to Rise 6-9%

Railroad freight traffic in 1959 should total 32-33 million carloads. This will be an increase of between 6 and 9 per cent over 1958 levels.

Carloadings in the first quarter, the most immediate concern to everyone, should be about 7.5 million, up more than 500,000 from the comparable 1958 period. The fact that business spending for plant and equipment still will be at relatively low levels during 1959 will be one of the major factors tending to keep railroad traffic below both 1957 and 1956 levels.

It seems clear, therefore, that although the economy as a whole will be trending upward, railroads will not share in the increase to the same extent as truckers and non-transportation companies generally.

Freight revenues in 1959, compared with 1958, should rise a bit more than carloadings. This favorable trend should be especially apparent during the first half of the year. If the physical volume of traffic actually does move up 6 per cent, it is likely that revenues will be up 8 to 10 per cent.

A not unimportant factor in the revenue increases will be the continuing upward surge of piggyback. For some roads, TOFC traffic now accounts for as much as 4-5 per cent of gross freight revenue, while it measures something less than that in physical volume.

Piggyback was one of the relatively bright spots for the railroads in 1959. There is every reason to believe that the 1959 volume of piggyback traffic will be 10-15 per cent above 1958 levels. This forecast does not reflect increases which may occur if the Interstate Commerce Commission approves so-called Plan 4 piggyback rates. Some of this latter traffic, particularly that of the forwarders, undoubtedly will not be additional business, since part of it will be taken out of box cars and placed in trailers on flat cars.

One factor which will tend to hold 1959 traffic below the levels of years prior to 1958 is the decline in export coal movement. Pocahontas roads, which handle the bulk of such traffic, are forecasting decreases of 20-30 per cent. Europe, prime market for this coal, seems to have plenty of it stockpiled. Nobody is optimistic that the situation will change in time to do 1959 export coal traffic much good.

While export coal traffic will be down, coal movement as a whole should be up. The steel industry will use most of the increased production. Shipments of building and construction materials also should increase a bit, as should steel and its products, automobiles and parts, and iron ore (both domestic and imported.) For the grangers roads, it looks like another good year.

This should be a year for further experimentation in both the rate and service fields. Western lines may prevail upon some of their eastern connections to speed up some of their freight schedules in an effort to reduce the transit time on freight from the East, particularly on that destined to Pacific Coast points. Additionally, there will be the usual continuing efforts on the part of most lines to reduce local schedules through operating changes. The changes will range from reshuffling classifications to yard improvement projects, and such things as signal and communications changes. Containerization, too, will be the subject of more active study.

Experiments in rates and market research made during 1959, however, probably will have more dramatic—and beneficial—long-range results for the railroads than attempts to run the wheels off cars to compete time-wise with the truckers.

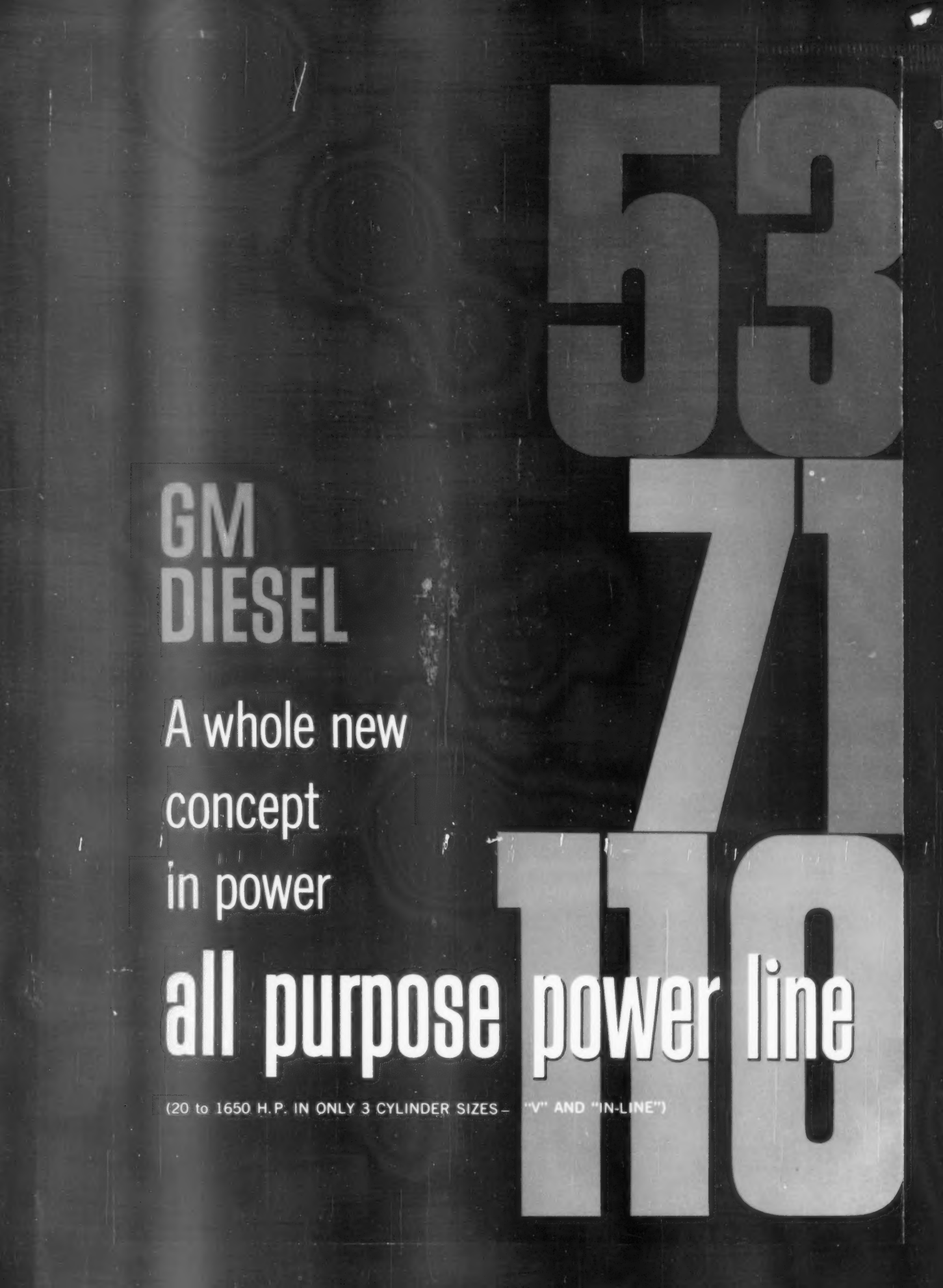
The first "guaranteed" or "agreed" charges likely will be filed with the ICC during the year, by the Soo Line. These rates, an import from England by way of Canada, contemplate an agreement between shipper and carrier that a certain percentage of the shipper's traffic will move by rail. This presumably makes it possible for the carrier to grant the shipper a rate somewhat lower than the commodity rates generally applicable to the traffic.

The trucking industry has left no doubt that it will fight adoption of "agreed" or "guaranteed" charges in this country. It is almost certain that the rates will be suspended and investigated by the ICC.

Another form of incentive rate likely will be tried by railroads to get shippers of liquids in tank cars to load more heavily. This would give the shipper a 50 per cent reduction from the rate for the first 10,000 gal. on all quantities over 10,000 gal. per car. If the shipper loaded his car with 20,000 instead of 10,000 gal., he would save 15 per cent on his bill. Meanwhile, the railroad would save money by moving one car instead of two.

One of the main revenue producers for the railroads always has been coal

(Continued on page 131)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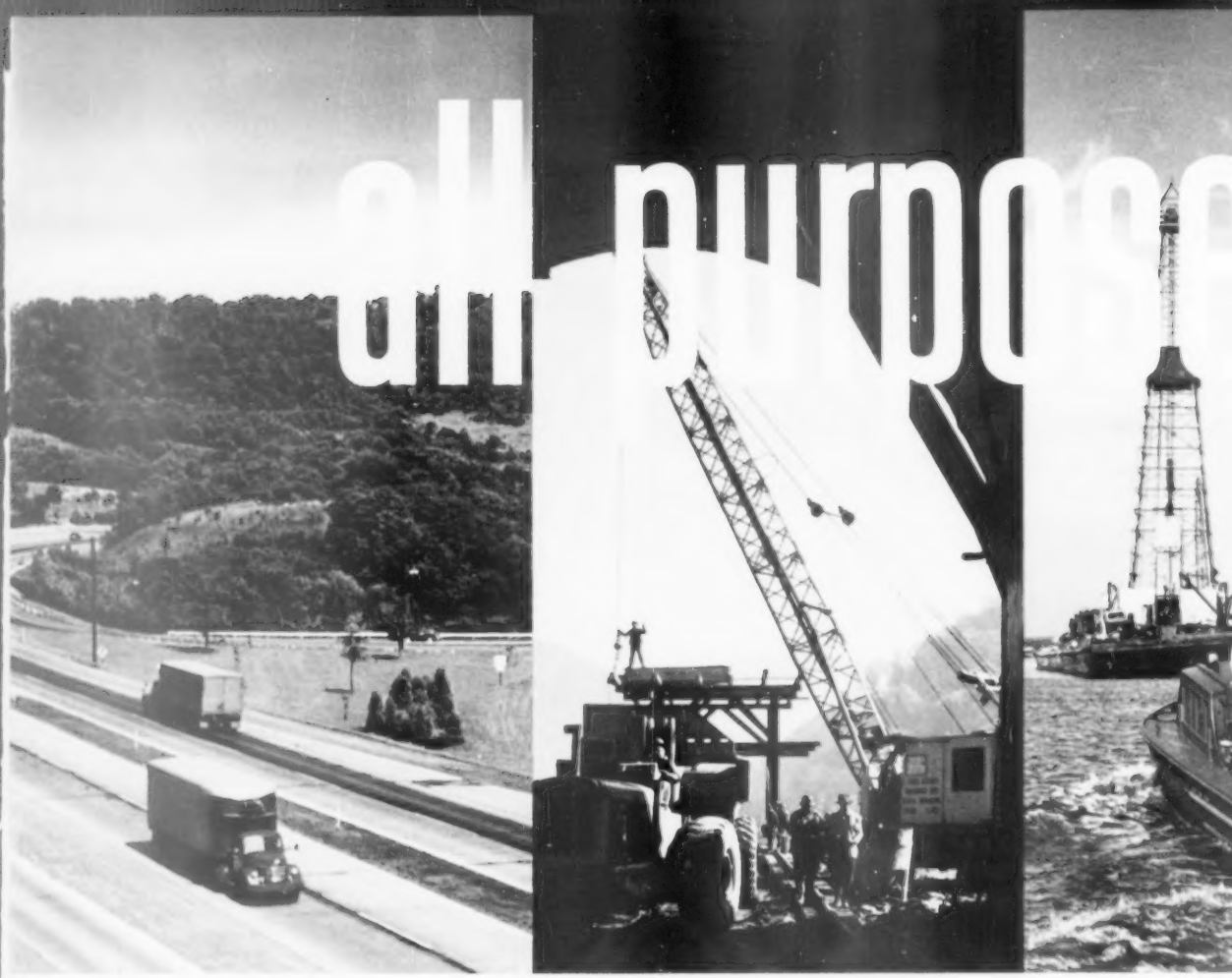

GM Diesel combines 8 New Basic "V" and "in-line" engines w

To help industry fill its power needs, GM Diesel engineers have developed the most comprehensive power concept since they pioneered the small 2-cycle Diesel.

Using only 3 cylinder sizes, they have more than doubled the number of basic engines — vastly increased the horsepower range — yet maintained the family relationship and parts interchangeability for which GM Diesels are famous.

Each engine features the ultimate in *compactness, light weight, high efficiency, durability and inexpensive maintenance.*

Basing their design on that of the versatile and capable GM Series 71 Diesel, GM Diesel engineers have created 8 new basic "V" and "in-line" engines which will add vastly new power coverage to the present Series 71 and 110.

First, the new Series 53 Diesel—comprising four basic and "in-line" engines—is a smaller, more compact versi the famous "71."

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Four new "V-71" engines complete the additions—wide power range of the "in-line" 71 Series—set new standard low weight and small size per horsepower. These "V

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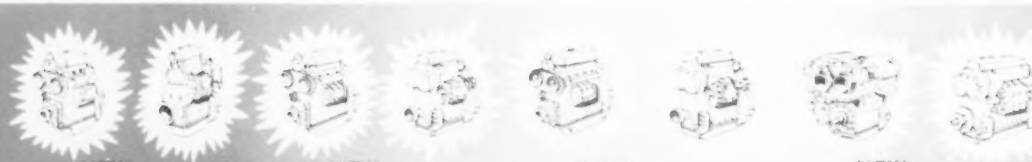
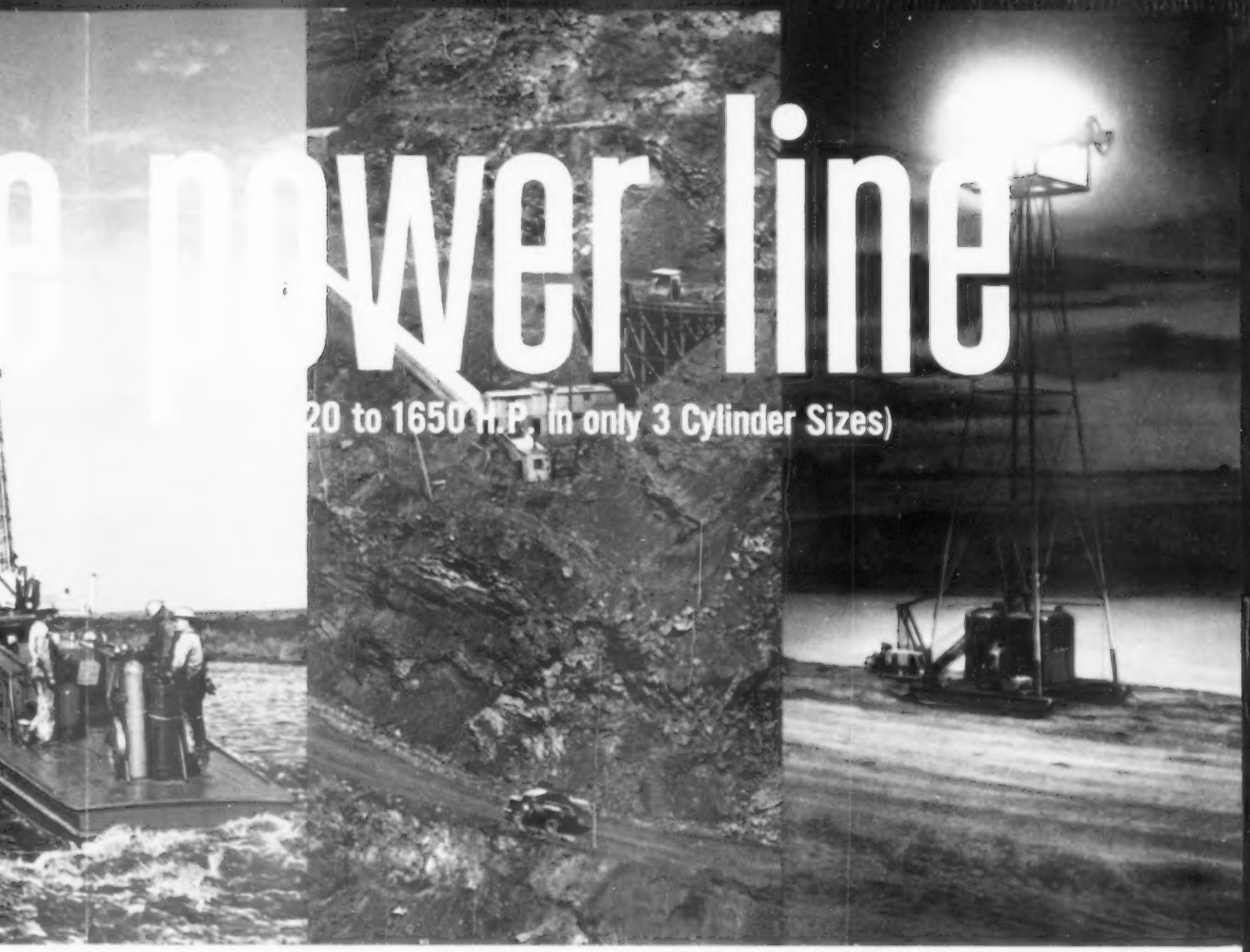


NEW		NEW		NEW		NEW	
"2-53" 20 to 47 H.P.	"2-71" 33 to 67 H.P.	"3-53" 38 to 97 H.P.	"3-71" 51 to 118 H.P.	"4-53" 51 to 130 H.P.	"4-71" 69 to 167 H.P.	"6V-53" 76 to 195 H.P.	"6-71" 112 to 252 H



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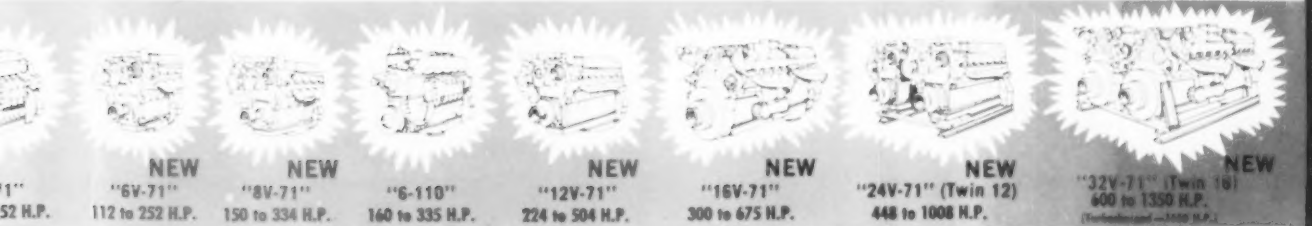

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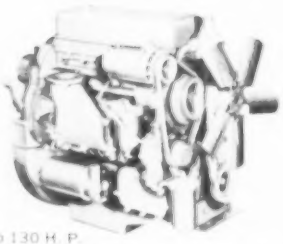

"4-53"—51 to 130 H. P.

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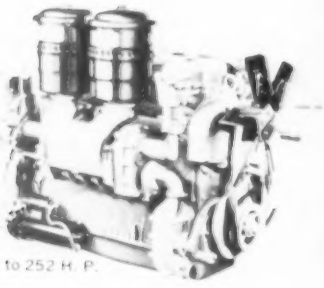

"6-71"—112 to 252 H. P.

SERIES 71 "IN-LINE"

—the versatile, time-proved economy Diesel
2, 3, 4, 6, Twin 4, Twin 6, Quad 6—33 to 1008 H. P.

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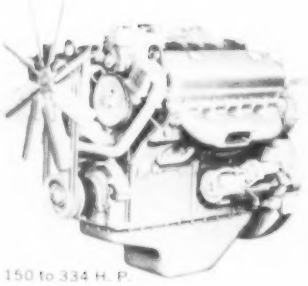

"8V-71"—150 to 334 H. P.

NEW "V-71"

—higher horsepower in smaller, more compact units
V6, V8, V12, V16, Twin V12, Twin V16—112 to 1650* H. P.

The new V-71 "Jimmy" Diesels are a further dramatic illustration of GM Diesel's mighty new power concept—rounding out the All-Purpose Power Line—yet retaining the GM family relationship and parts interchangeability. Here are engines destined to give you a better investment-earnings ratio than any you have ever had before. Diesels that boast the ultimate in compactness, light weight, high efficiency, durability, inexpensive maintenance and parts interchangeability.

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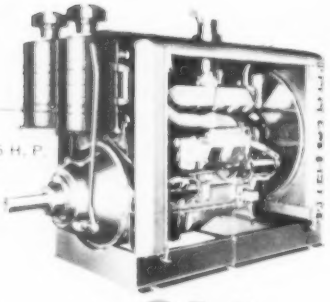

"6-110"—160 to 335 H. P.

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Litho U.S.A.

C. L. COMBES
Mechanical Editor

A. G. OEHLER
Consulting Editor

We predict 1959 will see locomotives of more horsepower, a greater interest in faster depreciation, an accurate answer to the what-are-maintenance-costs question, and an increase in the use of lower-cetane fuels to cut operating costs.

Bigger Power, Shorter Life

As traffic picked up late in 1958 the lethargic motive power market showed signs of coming out of the doldrums.

The big dieselization programs of the past decade have made it possible for most roads to get by without purchasing new power. Railroads actually have had a motive power surplus during the past two years. In 1958, for the second successive year, a substantial number of serviceable diesels (654 units as of Oct. 1), were sitting on storage tracks waiting for a traffic upturn to put them to work. Most of these were in the East where the traffic decline hit the hardest.

Besides the increase in stored power, there was an increase during 1958 of diesels in or awaiting shop. The number increased from 1,037 on Oct. 1, 1957, to 1,367 on Oct. 1, 1958. This deferred maintenance will result in stepped-up shop programs during the coming year.

In 1958, the steam-replacement market almost disappeared. Total steam ownership had dwindled to about 1,500 locomotives. Serviceable steam units numbered less than 1,000 and more than one-half of these were stored.

The replacement by diesel-electrics of the few remaining steam locomotives will continue in 1959. But motive power requirements in 1959 and for years to come will be affected more by the following four factors:

- Replacement of diesels that have outlived their economic life by either new, rebuilt or upgraded units.
- Diesel maintenance costs.
- Diesel operating costs.
- Acquisition of higher horsepower freight locomotives to meet a demand for faster freight service.

It has been assumed, since the inauguration of diesel road power, that the service life of locomotives is approximately 20 years. They have generally been amortized on that basis, with the approval of the Interstate Commerce Commission and the Internal Revenue Service. Evidence is accumulating, however, which indicates that the economic life of a road diesel electric locomotive is not more than 15, and perhaps not more than 12 years. If this is true, then a higher rate of amortization is essential to sound economies.

Let us assume road diesels must be replaced at the end of the 14th year.

There were 433 diesel road locomotive units placed in service during 1945. They will, of course, become 14 years old in 1959. Most will have been fully paid for. Comparatively few will have been completely amortized. If it is necessary to remanufacture and modernize, or replace these locomotives in 1959, the cost to the railroads for unamortized depreciation will be approximately 30 per cent of their original cost.

In addition, the railroads will have to pay or refinance the payment of between 80 per cent and something more than 100 per cent of the original cost of the locomotives, depending on whether rebuilt or new equipment is acquired. Aside from the depreciation of the purchasing power of the dollar which occurred during the past 14 years, the increase in cost may be caused by increased rating of locomotives.

The number of road diesel units becoming 14 years old and due to be replaced or remanufactured in 1960 will be 393. In succeeding years the number will be as follows: 1961 . . . . 1,008; 1962 . . . . 1,559; 1963 . . . . 1,775; 1964 . . . . 1,859; 1965 . . . . 2,209; 1966 . . . . 2,026; 1967 . . . . 1,281; 1968 . . . . 764; and 1969 . . . . 1,230. It is possible to extend the service life of a locomotive beyond the economic life, but this always means increased operating expense.

Based on present usage and trends, it is expected that by about 1963 the Class I railroads of the United States will require a maximum of about 21,500 road locomotive units. At that time, about 8,000 switchers will be in service. The economic life of a switcher is longer than that of a road locomotive — perhaps 20 years. If the average age of all diesel locomotives turns out to be 15 years, then the annual replacement requirements for Class I American railroads will ultimately average out to about 1,900 diesel locomotive units by about 1963.

Because of the large number of road locomotives acquired between 1948 and 1954, maintenance costs of diesel road units may be expected to reach a maximum during the period from 1960 to 1966. For all Class I railroads, this may be expected to be $420,000,000 per year in dollars of the 1956 value.

Fortunately, that $420,000,000 for annual maintenance of road locomotives is amenable to some reduction. Improved maintenance practices can reduce costs and extend both the economic and service life of locomotives.

Last year, in the face of declining earnings, railroads stepped up their search for ways and means to cut maintenance and repair costs. This search will continue. One of the most important objectives in the search will be to determine accurately the answer to the question: "What are these costs?"

This question was answered partly on the Baltimore & Ohio through its

(Continued on following page)

new motive-power cost-control system (RA, Oct. 13, 1958, p. 22). Inaugurated in late 1957, the automatic punch-card system started producing results by mid-1958. For the first time it gave management accurate labor cost data for each locomotive maintenance and repair operation at every shop and terminal on the system.

When the system is extended, as contemplated, to costs of material, the B&O will have control of the two major factors affecting maintenance costs—labor and materials. Installations of similar or comparable cost-control systems on other roads is in the cards, because accurate information is essential to sound cost reductions.

Another important factor in maintenance cost reduction is the reclamation of locomotive parts. It will get increased attention during the coming year as railroads look into every possible operation that may affect savings.

Operating men are seeking the horsepower required to step up freight train speeds. There are three ways to obtain more horsepower in a locomotive. One is to increase the horsepower per unit; the second is to increase the units per locomotive; the third is a combination of the first two.

As we enter 1959, higher horsepower units are prominent. General Motors sparked renewed interest in this field as it unveiled last month its new EMD 2,400-hp SD-24 model with a turbo-supercharged 567 D engine. However, it did not set the pace in this field. Alco Products had its turbosupercharged DL 600 B available much earlier; the Fairbanks-Morse 2,400-hp Trainmaster was in service more than five years ago.

With the substantial orders already placed in the short time since EMD entered this field, it is obvious that the units will be popular. But it should be noted that the added horsepower per unit is gained at some sacrifice in flexibility.

This demand for greater horsepower may have a marked influence on the total number of locomotives required to handle the traffic in the future. Freight trains operating at passenger-train speeds, particularly through heavy-grade territory, could easily boost requirements by many thousand units.

The development of high-voltage d-c testing of insulation has prevented many unnecessary failures of insulation during test. It has not eliminated the use of instruments for measuring insulation resistance, and roads continue to use a-c high potential testing.

Glass tape for banding traction motor and generator armatures is rapidly replacing steel wire. The tape has demonstrated its ability to stay in place at high temperatures even when a short circuit has burned a hole in the tape band. A primary requisite of its proper application seems to be that movement of coils be prevented by making the tension of the tape greater than the centrifugal force exerted by the coils at maximum speed.

Railroading  After Hours with Jim Fair

HOARD OF STORIES—E. A. Milroy, chief clerk to division freight agent of the Canadian National at Ottawa, has lent me a book of railroad anecdotes, "Rail Life," published in 1925 (and now out of print). The compiler was Alfred Price—one time general manager of CPR Eastern lines. Some of the stories are well known—one of them being the famous "off ag'in, on ag'in, gone ag'in, Finnigin" piece.

A lot of railroaders have unusual hobbies—but Mr. Milroy probably has a really unique one. He is, in his spare time, a carilloneur—that is, a bell ringer (23 bells minimum—played by a keyboard of levers and pedals).

SCHOOL DAYS—I've just received from the Transportation Center at Northwestern University a list of the companies that have sent their officers to the center's "general course," which runs through February and March. Quite a list of railroads and railroaders. AT&SF (2); C&O (5); RI (4); D&RGW (4); GN (1); IC (1); L&N (2); M&StL (1); NKP (1).

The idea that an officer automatically qualifies for the job above him, by doing well the one he already has, seems to be on the way out. Curiosity and knowledge about other occupations is growing as a requisite—and these management schools are means to that end.

TIMELY STUDIES COMING UP—I've heard that a couple of instructive books on railroads are now in the hands of the printer, for early publication—one the work on railroad problems that the Brookings Institution has sponsored, by Professor James Nelson; and the other an analysis of transportation competition, by a group of Harvard scholars. From what I know of the authors these volumes offer material for a lot of skull practice.

CHEERFUL U.P. NOTE—I ran into Howard Blanchard, Union Pacific's Washington, D.C., representative in the ICC building the other day and he handed me a proof of a forthcoming newspaper advertisement captioned "Why U.P. Advertises for Passenger Business." The ad tells about the faith U.P. has in its passenger traffic, which it has evidenced by acquiring attractive new equipment. The ad goes on to assert the belief that there are a lot of people "who firmly believe that travel was meant to be enjoyed—not merely endured"; hence the U.P. is staying in the passenger business, with enthusiasm.

More and more railroads are joining the group that has decided not to be licked by the passenger problem. With effort and persistence, the places where growth and profit possibilities exist will be located, and then the business will turn upward again.

IRISH RAILROADERS—One of the pieces in that book Mr. Milroy lent me is a poem that has three verses of Irish family names, every one of them a CPR officer at the time the piece was written. If you'd take the Irish out of railroading you wouldn't have too much left. But I wonder whether the proportion is quite as high as it was a generation or so ago. Of course, there has always been a plenteous delegation of English, Scots, Welsh and German family names, too.

I well remember years ago when I first encountered an Italian name (as I guessed it to be) among railroad officers—DeBernardi was the name, and he was a superintendent on the MoPac at Osawatomie, Kan. Now there are plenty of them in the official family, and good ones too. And French, Russian, Polish, Scandinavian and Dutch. I know of at least one native Mexican who rose to an important position on a US railroad.

By ROBERT J. BARBER
Associate Editor

I expect signal construction to again rise to the 7,000-unit level. A survey of major railroads indicates plans to spend $45,000,000 on capital improvements to the signal plant. Twenty-two roads compared expenditures planned for 1959 with those of 1958. Of these, 23% will spend about the same amount, while 45% will spend more. Major work to be undertaken includes 973 miles of CTC, three automatic classification yards and many automatic highway crossing protection installations.

7,000 New Signaling Units Seen

Signal construction in 1958 ran at 79 per cent of the 1957 rate, with 5,929 units installed in 1958, compared with 7,549 units installed the previous year.

The decline was across the board, except for automatic interlockings and automatic block signaling, which showed increases.

There are good reasons, however, for viewing the new year optimistically. In addition to the general economic recovery for all business and industry, railroad revenues are showing an upturn.

These signs of more revenues ahead, plus the economic advantages of signaling systems, should spur signal construction to resume its high rate this year, and for the next few years.

Major economic advantages of signal systems are: (1) more efficient utilization of locomotives; (2) increased track capacity; (3) reduced operating expenses; and (4) the ability to amortize themselves in about five years or less.

Centralized traffic control was installed on over 1,000 miles of road during 1958. Although most roads installed CTC on single track, several roads equipped lengthy sections of double track with CTC.

During 1958, the Santa Fe installed traffic control on 25 miles of double-track mainline in Kansas. In the heavy-traffic territory between Detroit and Plymouth, Mich., the Chesapeake & Ohio installed CTC on 17 miles of double-track mainline. The Delaware & Hudson and the Virginian also installed traffic control on 11-mile and 19-mile sections of double track, respectively.

A form of modified CTC, with a spring switch at one end of a siding and a power switch at the other, was installed by the Boston & Maine between Concord and Westboro, N. H., 69 miles. This form of traffic control is gaining favor as a means to increase track capacity, reduce operating expenses, and do it at a cost not much more than automatic block signaling. Many roads are re-examining their light-traffic lines with the thought that modified CTC would pay for itself and produce annual savings long after the capital investment is amortized.

Mainline Trackage Cut

Using either modified or conventional traffic control, several roads have been able to remove mainline trackage when converting to CTC. The Louisville & Nashville and the Maine Central converted double-track mainline to single-track CTC with sidings. The Milwaukee recently converted a 27-mile section of two-track CTC to single-track CTC between Collins and Madrid, Iowa, on its Chicago-Omaha mainline.

The New York Central has reduced its mainline between Buffalo and Cleveland from four tracks to two, with traffic control on the remaining two tracks. It has resumed work on the $5,000,000 project of installing traffic control on 145 miles of road between Buffalo and Syracuse, N.Y. Here again, the four-track mainline will be converted to two tracks with CTC, to provide either-direction running on both main tracks.

Modern automatic retarder classification yards not only reduce the time spent in classifying cars, but pay for themselves in about five years by reducing operating expenses. One western road replaced a flat switching yard with a modern gravity-type retarder yard with automatic switching and automatic retarder controls. It obtained an annual return of 19 per cent of the total cost. The Boston & Maine estimates that its proposed new retarder yard at Montague, Mass., will cost $18,500,000, but it will provide savings of $4,500,000 annually.

New, modern, automatic yards often replace several old, flat switching yards and reduce the amount of switching required at other yards. The Robert R. Young Yard at Elkhart, Ind., on the New York Central, replaced 12 yards and considerably reduced switching at others. Cicero Yard on the Burlington near Chicago also reduced damage to cars and lading by 85 per cent, will

(Continued on page 58)

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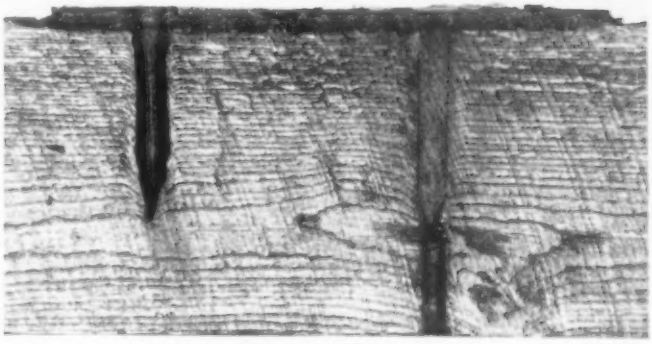

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SIGNALING OUTLOOK

(Continued from page 55)

classify cars 3½ hours faster than formerly and will provide savings equal to 10 per cent on the $4,000,000 investment, after taxes.

A unique installation by the Richmond, Fredericksburg & Potomac speeded operations in its flat switching yard at Alexandria, Va. A system of yard indicators and non-interlocked power switches on the ladder track allows trains to enter the yard quickly.

There is also help for older gravity yards, with manual retarder controls. A mobile laboratory has been developed that enables engineers to make complete measurements on cars moving into classification tracks. Using these measurements, a computer in the lab truck computes rolling characteristics of the cars. From this data, an engineering study is made for upgrading the yard, such as adding automatic switching, automatic retarder controls, or both, and indicating the savings that would result.

New yard construction looks promising for 1959. The B&M expects to begin construction of Montague yard by the end of this year. The Canadian National has begun construction on three new retarder yards: at Moncton, N.B.; at Montreal, Que.; and at Winnipeg, Man. The Missouri Pacific is working on its Neff Yard at Kansas City. Several other railroads have yards under construction or ready to go.

In the economy drive of 1958, many roads "found" crossings with others where an automatic interlocking could do the work formerly required of a leverman around the clock. Such a saving for one plant could run over $20,000 annually. This figure is based on the 40-hour week and includes such things as paid holidays, vacation, retirement and insurance. The drive to eliminate attended interlockings at railroad crossings will continue. One road has nearly completed a program to provide automatic interlockings at all such railroad crossings.

Automatic control of switches at interlockings is now in service on the Flushing line of the New York City Transit Authority. Included as part of this project is a system of train identification. Although most railroads do not have the traffic density of this rapid transit system, some railroad men are considering automatic control of switches at outlying interlockings or junctions. A local freight or "turn" could be equipped with the inert coil for train identification, so that as the train passes a wayside receiver, controls would be initiated to operate the junction switch and clearing signals. Thus the local train would automatically line its route onto the branch line.

Automatic highway crossing protection installations continued at a good pace during 1958. Of the installations made, 59% were paid for by joint railroad and public funds, and 30% were paid for by the railroad alone. With the yearly increase in motor vehicles, it is more important than ever to have automatic protection not only to protect vehicular traffic, but to expedite its flow.

Several railroads in Illinois have been able to obtain municipal aid for automatic protection projects by pointing out that modern crossing gates and signals will decrease the interference to highway traffic while giving a greater degree of safety.

Modern protection with automatically controlled flashing-light signals and short-arm gates provides uniform and improved protection around the clock. Wages for a crossing watchman, including vacations, insurance, etc., based on the 40-hour week can run to $19,000 annually. At this rate, the savings from automatic protection installed to replace watchmen will pay for the new automatic protection within two years, in many instances.

The rapidly expanding federal highway program should make additional funds for automatic protection available; not all federal highway improvements call for grade separations, as many crossings are at grade with light traffic branch lines and sidings.

A system of electronic track circuits for highway crossing protection installations has been developed which eliminates the need for insulated joints. The Santa Fe made an extensive test using the audio frequency track circuits. Several other railroads have used this audio frequency circuit for the "island" or positive section at highway crossings. The circuits use current in the audio frequency range around 1 kc. It does not interfere with conventional signal track circuits. This new type circuit should be of particular interest to those railroads using welded rail or electric propulsion.

Hot Box Detectors

During 1958, hot box detectors were installed on several railroads. The New York Central is continuing its program of installing detectors on all mainlines. It has 32 detectors in service, and plans to install 20 more this year. Savings in inspection time are already apparent on one part of the railroad. The carmen inspect only those journals that have been "spotted" as abnormally hot by the detectors. Other roads follow a similar practice, resulting in less inspection time, and allowing trains to leave yards sooner.

Expect to see more hot box detectors installed during this and following years. Not only do these detectors pinpoint hot boxes that, if not attended to, could cause a wreck. They also reduce inspection time in yards and reduce delays to trains. The Reading estimates that by detecting a hot journal before it becomes dangerous, a saving of approximately $300 per axle can be made when no wheel change is required.

A wheel checker to detect broken flanges on wheels has been installed at Mechanicville Yard on the Boston & Maine. Several other roads are installing these detectors on approaches to humps in retarder yards.

Signal construction should resume its high level this year. The Transportation Act of 1958 should encourage capital improvements; and with virtually complete dieselization, the next area for substantial savings to the railroads is modern signal systems.

Signal Installations Completed 1956-1958

	1958	1957	1956
Automatic block signals	493	423	864
Centralized traffic control			
Power switch machines	458	586	819
Lever controlled signals	1,116	1,454	1,948
Intermediate signals	671	1,030	1,453
Classification yards			
Car retarders	44	61	69
Power switch machines	248	383	254
Highway crossing protection			
New installations, gates and flashers	1,380	1,630	1,320
Interlockings			
Signals and switches installed at new and rebuilt plants (excluding automatic plants)	999	1,417	1,303
Signals and switches installed at new and rebuilt automatic plants	259	171	269
Spring switches			
Spring buffer mechanisms	80	127	147
With facing point locks	52	59	41
Signals at spring switches	129	208	268
Totals	5,929	7,549	8,755

By R. W. McKNIGHT
Signaling Editor

I predict that communications installed in 1959 should reach approximately 9,000 units. Railroads will spend most of their communications dollars for expansion of radio systems, carrier, automatic telephone exchanges and long-distance dialing equipment. Microwave construction will be renewed to provide trunk-line communications. A survey reveals that 18 railroads are planning to spend over $4 million on capital expenditures for communications installations this year. Of 27 roads that gave definite answers comparing expenditures proposed for 1959 with those made in 1958, 22 per cent plan to spend more, 33 per cent plan to spend about the same.

Communications Gains in 1958

Railroad communications departments were kept busy during 1958, despite the economic downtrend in the country in general and the railroad industry in particular. Equipment installers saw no let-up as roads installed more voice carrier terminals and repeaters than in any previous year.

Why the upsurge? Data communications is the answer. Most railroads have automatic business machines, ranging from small desk calculators or accounting machines to giant computers or "electronic brains." More are coming. This means for the communications department that more circuit capacity is needed for handling data communications.

Transceivers operating on voice channels, and printing telegraph are now handling data communications. Transceiver operation, which has been under test by various roads, is now in service on several railroads. The Union Pacific, for example, converted its car reporting system from printers to transceiver operation. The road is also handling payroll and other accounting department information via transceivers on a system-wide basis. Other transceiver users include the Canadian Pacific, Chesapeake & Ohio, New York Central, Northern Pacific and Wabash (RA, Dec. 22-29, 1958, p. 24).

Although transceivers will operate on telegraph channels, most roads are operating them on voice channels because the telephone type IBM transceiver has about twice the card handling capacity of the telegraph type. When circuits are connected in tandem, distortion is less when the telephone type is used.

The Northern Pacific has used transceivers for handling payroll data between Seattle and St. Paul. During two different months the NP transmitted 34,000 and 20,495 cards, which averaged 7.7 cards per minute and 7 cards per minute, respectively. The difference from the 11 cards per minute which the equipment is designed to handle occurred because the NP tests covered the total time of transceiver operation including stoppages.

'Highly Successful Operation'

"While our experience with the use of transceivers for transmission of payroll data is certainly not all-inclusive, we consider our operation highly successful," says D. C. Hill, NP superintendent of communications. "So successful, in fact, that in the next year or two we will be installing transceivers for handling car information between major yards and our St. Paul headquarters."

Expansion of automatic telephone systems has also required more voice circuits. Several roads working toward complete systems are: Atlantic Coast Line, Canadian Pacific, Northern Pacific, Southern Pacific and Union Pacific (RA, May 26, 1958, p. 21). Others are beginning to convert to long-distance dialing with the goal of an all-automatic telephone system. Such a road is the Pittsburgh & Lake Erie, which now has direct dialing between Youngstown, Ohio and Pittsburgh, Pa.

Printing telegraph made slight gains in 1958. The biggest boost in carrier terminals and repeater equipment came about because Canadian railroads expanded their printer systems. The CPR is using printing telegraph in its extensive data communications network which links all yards, terminals and major offices to Montreal headquarters. The Baltimore & Ohio is extending its printer network for its system-wide car reporting system, which is well under way.

Microwave, still in the planning stages on many railroads, is being installed by the Santa Fe between Kansas City and Topeka, Kan. This 60-mile system is another link in the road's plans for microwave from Chicago to Los Angeles. The Canadian National and the CPR have been adding microwave for their commercial service. And the Alaskan Railroad has a microwave system through particularly rugged terrain between Anchorage and Portage, 50 miles. *(Continued on page 62)*

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COMMUNICATIONS GAINS

(Continued from page 59)

New microwave construction should get under way during 1959. The Denver & Rio Grande Western plans to begin installation of a microwave system for trunk line communications between Ogden, Utah and Denver, Colo. It expects to send freight waybills via facsimile and microwave from Ogden to Denver concerning cars received in interchange at the Ogden gateway. Accounting and traffic department processing will take place while the car is enroute eastward. The microwave system will also handle telephone, printing telegraph and possibly VHF radio links.

Television at Highway Crossing

Television as well as flashing-light signals and short-arm gates were installed at a railroad-highway crossing in 1958. The Delaware & Hudson placed a TV camera on a pole and focused it on an industry spur and the main track at Cohoes, N. Y. The viewer is in a watchman's tower several blocks distant. When a switch engine is to be moved onto the crossing, the engineer dims and brightens the locomotive headlight several times, which the watchman sees on his TV screen. By supervisory manual control, he lowers the gates. He watches the engine moves, and can raise the gates when the locomotive is clear of the crossing.

At its Hagerstown, Md., yard, the Western Maryland has installed TV cameras for "grabbing numbers" of freight cars. This system is reported to save three men per day formerly required for such car checking work.

Railroad radio growth has been steady, and 1958 was no exception. Radio installations, both road-train and yard, were installed at the high rate of 2,857 units during 1958, which was only 4 per cent below the number installed in 1957. Most roads added to their existing systems. The SP made one of the larger gains: 219 locomotives, 133 cabooses or other cars, and 22 wayside stations radio equipped for road train service. The Boston & Maine, St. Louis Southwestern and the Texas & New Orleans made sizable additions to road-train radio systems.

Dispatcher-control systems are going in on some roads. With such a system a dispatcher can remotely control wayside radio stations, attended or unattended, and the road gets solid radio coverage 24 hr a day. The Lehigh & Hudson River made such an installation this year by equipping all locomotives and cabooses with radio. The dispatcher at Warwick, N.Y., has control of five wayside stations on the 86-mile bridge line (RA, Nov. 24, 1958, p.46). A western railroad which has two dispatcher-control radio systems in service, plans to extend each of them during 1959.

Walkie-Talkies Keep Pace

Walkie-talkies kept pace with other radio equipment installations during 1958. Car checking and car inspection radio systems accounted for most of the growth. The New York Central, Pittsburgh & Lake Erie and the Southern Pacific made installations of this type during the past year. The P&LE installed these inspection radio systems at four yards: Youngstown, Ohio, and McKees Rocks, Newell and Brownsville, Pa. The inspectors carry walkie-talkies that transmit on one frequency and receive on another, working through separate base receiving and transmitting stations (RA, Apr. 14, 1958, p.16).

Other uses of walkie-talkies are for directing switching operations during fogs, for setting stakes and reading levels by surveying parties, aiming searchlight signals, and checking switch positions and signal aspects when placing new interlockings into service.

Materials Handling Equipment

Railroads are also equipping fork lift trucks, tractors and other materials handling equipment at freighthouses and shops for coordinating their operations. One road has equipped an overhead traveling crane with radio so that the foreman on the shop floor can give detailed instructions to the crane operator. As one man said, "When you can talk to a fellow, you can do your job so much better, and so can he."

The maintenance-of-way department is using radio to increase the production time of gangs and expensive on-track equipment. An adjunct to this radio usage is that train delays are also being reduced. In many cases, delays are eliminated where trains encounter these gangs along the line. One railroad equips its bridge gangs with radio. They have a portable base station that is set up at the bridge site. Orders are written directing crews of approaching trains to radio the gang foreman. He gives instructions for crossing the bridge. Delays are eliminated and the bridge gang has more working time now that they can communicate with approaching trains.

"Split-channel" radio operation is here. The new frequency allocations have been made by the FCC, presented to the AAR, and, with minor changes, accepted by the railroads. Several roads are now operating with the new narrow-band equipment (10 kc bandwidth with a deviation of plus or minus 5 kc). Other roads have begun converting their older equipment. All railroad radio will have to meet the new narrow-band requirements by November 1, 1963 (RA, May 26, 1958, p. 23).

More intercommunications systems were installed last year in offices, freighthouses and shops than in 1957.

(Continued on page 136)

Communications Installations — United States and Canada

	1958	1957	1956
Miles of new or rebuilt pole line	3,450	6,139	7,304
Miles of new copper line wire	4,475	4,546	7,752
Miles of new aluminum line wire	1,319	6,089	4,086
(1) Long distance voice circuits			
Carrier channel terminals	1,600	899	714
Voice carrier repeaters	209	168	152
(2) Printing telegraph circuits			
Carrier channel terminals	1,017	996	948
Carrier telegraph repeaters	26	8	34
(3) Road train communications			
Locomotives	826	875	966
Cabooses and other cars	570	554	491
Fixed wayside stations	125	136	175
Walkie-talkie sets	375	568	406
(4) Yard radio communications			
Locomotives (autos, trucks)	436	448	416
Fixed stations	154	120	101
Walkie-talkie sets	371	288	168
(5) Yard loudspeaker systems			
Two-way speakers	1,250	1,672	935
Paging speakers	449	511	459
(6) Intercommunications systems			
Telephones	680	407	255
Loudspeakers	841	795	561
Total of communications equipment units (sum of 1 through 6)	8,929	8,445	6,781

1958 Review of Railway Operations

By J. ELMER MONROE

Vice President, Association of American Railroads
and Director, Bureau of Railway Economics

Highlights of the Year

Seldom does a single year record so many and such varied developments of interest and concern to railroads as was the case in 1958.

The year began under discouraging conditions. General business trends pointed downward, with recent wage and other cost increases bearing heavily on operating expenses. There was little indication of how long the recession would last or how deep it would penetrate. The hoped-for bottoming-out came during the second quarter, however, and was followed by an upturn in the third and fourth quarters.

For many roads, even this improvement did not lift traffic and earnings very far toward recovery levels. Further wage and other cost increases contributed to an already drab picture. Large grain-carrying railroads did get considerable boost from bumper harvests and were able to make a fairly good showing for the year.

Preliminary estimates for 1958 point up these results for Class I roads:

- Revenue ton-miles approximated 550 billion, down 11 per cent from 1957's 618 billion. The 1958 aggregate was about the same as in the recession year of 1954, but was less than any other post-war year except recession and strike-ridden 1949.
- Passenger-miles of 23.3 billion in 1958 were off 10 per cent from 1957's total of 25.9 billion. This was the seventh consecutive year of decline in railroad passenger traffic and the 1958 total was lowest since 1939.
- Net railway operating income of $750 million in 1958 was 19 per cent below the year-earlier figure of $922 million.
- Rate of return on net property investment in 1958 was about 2.75 per cent, about equivalent to 1946 and otherwise the lowest since 1939. The 1957 figure was 3.36 per cent.
- Net income after charges approximated $590 million in 1958, nearly 80 per cent of which was earned in the last half. The 1957 net was $737 million; in 1955, it was $927 million.

These results, disappointing in themselves, were in contrast with other 1958 developments which held promise for the future. *(Continued on next page)*

HIGHLIGHTS OF THE YEAR

A REVIEW OF RAILWAY OPERATIONS IN 1958

- Economic trends, already improving, seemed likely to continue their upturn into 1959.
- Public concern over the deteriorating financial situation of railroads mounted during 1958—brightening prospects for constructive public action on the basic ills besetting the industry.
- Railroads attacked with renewed vigor studies of those areas in which self-help measures seemed to offer possibilities.

The past year was also a busy one on the legislative front. The Smathers subcommittee of the Senate Committee on Interstate and Foreign Commerce began extensive hearings in January, and in 11 weeks received 103 statements from railroads, regulatory bodies, shippers, competing modes of transport and others.

The subcommittee issued its report on April 30, recommending immediate legislative action on a number of helpful measures and deferral of action on other issues pending further study. As a result of these activities, Congress removed, effective August 1, the excise tax on movement of freight by commercial carriers and enacted the Transportation Act of 1958. The Senate also authorized further study of other railroad problems and voted funds for such work. That work may get underway early in 1959.

Considerable activity also took place in the regulatory field in 1958. The ICC handed down final decisions in several pending general rate increase cases, including Ex Parte No. 212 (freight rates), Ex Parte No. 210 (express rates) and Docket No. 9200 (Eastern mail pay.). Hearings in Docket No. 31954 (passenger train deficit investigation) were concluded and a proposed report issued by the hearing examiner.

On the labor side, wage rates in the industry rose to new highs in 1958, while employment fell to a 60-year low. One significant event in the field in 1958 was negotiation by the Canadian Pacific of an agreement, in line with recommendations of a Canadian Royal Commission, providing gradual elimination of firemen on diesel locomotives in freight and yard service.

Still, in a number of important areas, 1958 was not a year of decision for the railroads. Much remains to be done in the legislative field if sound and equitable competitive conditions are to be restored in the broad field of intercity transportation of goods and passengers. The further studies to be made in 1959 under direction of the Senate Interstate and Foreign Commerce Committee should do much to clear the way for constructive action.

(Continued on page 66)

MORE PROGRESS BY RAIL

Photo courtesy Southern Pacific Railroad

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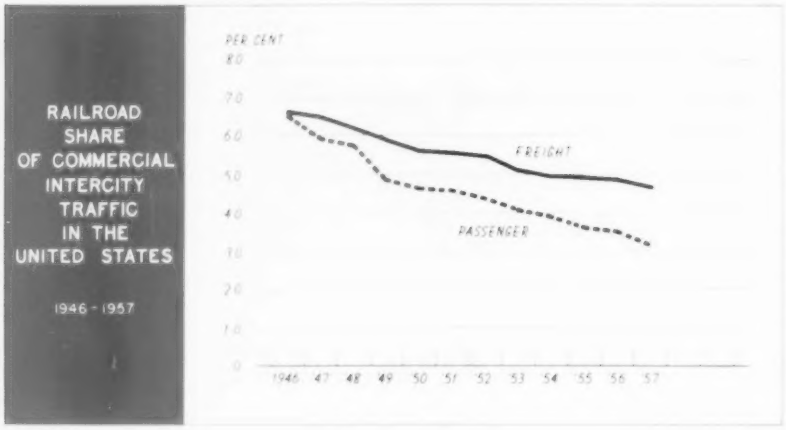

Table 1: Comparative Traffic Summary: 1949-1958

Year	Revenue ton-miles (millions)	Revenue passenger-miles (millions)	Revenue carloadings (thousands)
1949	526,500	35,095	35,911
1950	588,578	31,760	38,903
1951	646,620	34,614	40,499
1952	614,754	34,010	37,985
1953	605,813	31,655	38,216
1954	549,259	29,286	33,915
1955	623,615	28,526	37,636
1956	647,077	28,185	37,845
1957	618,194	25,884	35,500
1958 (est.)	550,000	23,300	30,206

Table 2: Carloadings by Commodity Groups: 1958 vs. 1957

Commodity group	Per cent of total	1958 carloadings (thousands)	Decrease under 1957 carloadings (thousands)	Decrease under 1957 Per cent
Miscellaneous	50.5	15,235	2,315	13.2
Coal	18.3	5,522	1,228	18.2
Grain	9.5	2,873	i 199	i 7.4
Merchandise, LCL	7.7	2,331	419	15.2
Forest products	6.1	1,850	145	7.3
Ore	5.8	1,745	1,117	39.0
Coke	1.1	342	233	40.6
Livestock	1.0	308	36	10.3
Total	100.0	30,206	5,294	14.9

i Increase

Review of 1958 Operations

(Continued from page 64)

The downward trend of railroad traffic, which began early in 1957 and became more pronounced in the latter part of that year, continued in the early months of 1958, as both freight and passenger traffic remained at levels far below those of the corresponding months of 1957. With quickening economic activity in the late spring and summer, traffic levelled off, then climbed toward 1957 levels in the fall. By the closing weeks of the year, freight volume had approximately reached the receding level of corresponding periods a year earlier, and signs pointed toward further improvement in 1959.

Passenger traffic throughout 1958 continued to lag behind corresponding 1957 months.

Revenue ton-miles in 1958 fell to about 550 billion, a total roughly equal to that of 1954, but otherwise the lowest since 1949.

Freight traffic, thus measured by tonnage handled and distance hauled, was down by 11 per cent from the 1957 level and was 15 per cent off from that of 1956.

Passenger-miles in 1958 are estimated at 23.3 billion, off about 10 per cent from the 25.9 billion total of 1957, and the lowest volume of passenger traffic handled by the railroads since 1939. Final statistics are expected to show that commutation traffic in 1958 declined only slightly, if at all, below that of 1957, and that other-than-commutation passenger-miles were off about 10 per cent in coaches and perhaps 20 per cent in sleeping and parlor cars. Compared with 1939, however, only sleeping and parlor car travel will show a decline; commutation passenger-miles will be up about 20 per cent and other coach traffic will be up at least 25 per cent over the level of that pre-war year.

Carloadings of revenue freight fell to the lowest level in 25 years, the 1958 total of 30,206,000 cars being down 15 per cent below the 35,500,000 cars loaded in 1957. As shown by Table 2, seven of the eight commodity groups showed decreases ranging from 7 per cent to 41 per cent, while one group, grain and grain products, exceeded 1957 loadings by 7 per cent, and in fact exceeded the loadings of each of the other 40 years in which these records have been maintained.

Percentagewise, the sharpest declines in carloadings in 1958 were shown by coke, ore and coal, down 41 per cent, 39 per cent and 18 per cent, respectively, and reflecting a low level of operations in the steel industry. Loadings of less-than-carload freight fell 15 per cent below 1957 and reached a new all-time low.

Miscellaneous loadings, the largest of the reported groups, decreased by 2,315,000 cars, or by 13 per cent. Loadings of livestock, the smallest group, were down 10 per cent. Forest products in the latter part of the year ran well ahead of corresponding weeks of 1957, but the year's total for this group was 7 per cent below the 1957 level.

The loading of highway trailers on flat cars, commonly known as "TOFC" or "piggyback" traffic, made substantial gains in 1958. From a weekly average of 4,200 cars in January, about equal to the TOFC loadings in the corresponding weeks of 1957, this traffic increased to an average of 6,700 cars per week in October 1958. The October loadings were 28 per cent higher than those of October 1957 and 48 per cent higher than October 1956. Loadings in November 1958 showed a seasonal decline, but stood 34 per cent above the corresponding weeks of the previous year and, for the first time, exceeded one per cent of all revenue carloadings. Total TOFC loadings for the year 1958 approximated 276,000 cars, up about 11 per cent over the previous year. At the close

of the year 41 railroads were reporting loadings of this type of traffic.

Rates and Fares

There was considerable activity in 1958 in the area of railroad rates and fares. During the year the ICC disposed of all pending general increase cases, most of which carried over from preceding years.

As a result of expanded traffic research programs, the railroads uncovered a number of areas where freight rate reductions could profitably be made. Many of these reduced rates were put into effect, but the commission suspended some important ones for seven-month periods pending further investigation. Other railroad studies looking to possible important changes in the basic freight rate structure were progressed during the year to a point where concrete proposals may soon be forthcoming.

Ex Parte 212, Increased Freight Rates, 1958. In its final report and order in Ex Parte 206, decided August 6, 1957, the ICC recognized that railroads would shortly incur further new wage and other cost increases. The commission said:

> "When these become an actuality, the respondents may further petition us in this proceeding to modify our outstanding orders so that they may file schedules, accompanied by adequate justification, subject to protest and possible suspension, proposing further moderate increases in such rates and charges to cover additional increases in expenses which have materialized. We have heretofore suggested that the time had probably come when consideration should be given to ways of increasing rates other than by means of horizontal increases. The carriers should give consideration to this suggestion. If tariffs are filed as outlined herein, they should reflect the results of this consideration." (300 I.C.C. 633, at page 687).

After due consideration of all related factors, the rail carriers in December 1957 filed tariffs to become effective on February 1, 1958, setting forth a schedule of increases on selected commodities and accessorial services. These were of varying amounts, thereby conforming to the commission's admonitions. Effective date of the tariffs was later voluntarily moved forward by the carriers to February 15, 1958. The matter was docketed as Ex Parte No. 212, Increased Freight Rates, 1958. After submission of verified statements and protests and the holding of oral arguments, the commission on February 11, 1958, authorized most of the proposed increases in line-haul rates and some of the proposals with respect to accessorial charges to go into effect. These authorizations, together with the suspended proposals, were all made subject to further investigation by the commission. After further hearings and oral argument, the commission on September 9, 1958, handed down its final report and order in the proceeding, making a few minor changes in its previous authorizations with respect to line-haul rates and authorizing some additional adjustments in accessorial charges. The new line-haul rates, assuming full application on both interstate and intrastate traffic, were calculated to increase freight revenues by 2.1 per cent. Including the new accessorial charges, total freight service revenues were increased by about 2.3 per cent.

Mail pay. Eastern railroads filed a petition with the commission on July 3, 1956, seeking increases in mail pay rates. This was followed later in 1956 by a simliar petition on behalf of Southern railroads and early in 1957 by one on behalf of Western railroads. Agreements were reached with the Post Office Department in 1957 by both Southern and Western railroads and these were approved by the commission on December 30, 1957. (RA, January 20, 1958, p.62).

The amended petition of Eastern railroads, reflecting new wage and other cost increases incurred subsequent to July 3, 1956, sought increases in mail pay rates averaging 58.63 per cent for the period July 3, 1956, to October 31, 1956, 63.84 per cent for the period November 1, 1956, to October 31, 1957, and 70.14 per cent thereafter, each calculated over rates in effect prior to July 3, 1956. Hearings were concluded late in 1957 and oral arguments were held in February 1958.

The commission handed down its report and order on June 23, 1958, authorizing increases for Eastern railroads of 20 per cent, 25 per cent and 30 per cent for the three above-defined periods. The commission also prescribed the space-used basis of pay for Eastern railroads, effective September 1, 1958, together with such further increases in rates as would enable those carriers approximately to offset resulting decreased revenues.

Passenger fares. While there was considerable activity in this area in 1958, it was not on a uniform or nationwide basis. There were a number of increases in commutation fares on railroads serving the larger cities. A group of Eastern railroads outside the New England area increased coach fares by 5 per cent on January 1, 1958, and again by the same amount on November 1, together with a 15 per cent increase in first-class fares on the later date. The New Haven increased first-class and coach fares by 5 per cent on July 1, 1958, and again by the same amount on December 1. This latter increase was also applied on most other New England roads. Some Eastern roads made no increases in basic passenger fares in 1958.

In the West, several railroads in 1958 inaugurated experimental plans of honoring coach-class tickets in standard sleeping cars upon payment of regular occupancy charges. Other experimental plans were announced for application in 1959. Tariffs were published by Western railroads to become effective January 1, 1959, increasing transcontinental round-trip coach fares to and from the Pacific Coast by 5 per cent. A group of Western railroads also published 5 per cent increases in other coach fares, with exceptions, effective the same date, but these increases were suspended on December 31, 1958, following denial of Fourth Section relief.

The problem of money-losing commutation passenger services received more than ordinary attention in 1958. In addition to fare increases, various other means of maintaining these im-

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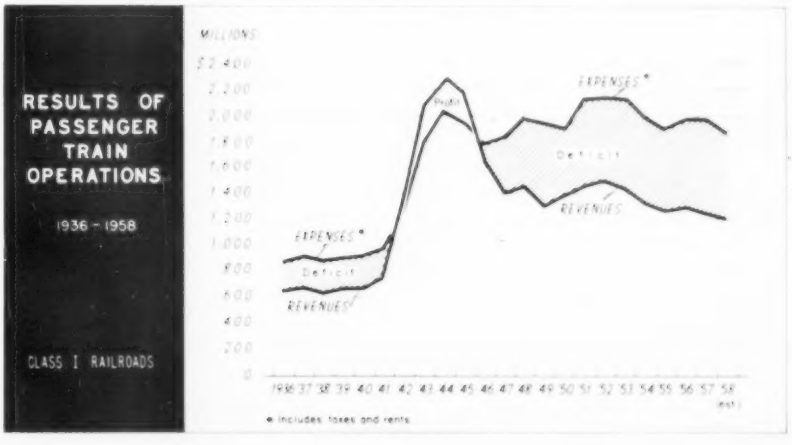

(Continued from page 67)

portant but uneconomic public services were undergoing examination. Temporary experiments involving cooperation of local governments were under way in the Boston and Philadelphia areas, and proposals for tax relief or other aid were before local governmental bodies elsewhere.

Express rates. On July 24, 1957, the Railway Express Agency petitioned the commission for a general 15 per cent increase, with some exceptions, in LCL and carload express rates and charges. This request was docketed as Ex Parte No. 210, Increased Express Rates and Charges, 1957. Hearings were held in October 1957 and in January 1958, and the commission handed down its report and order on October 13, 1958. With a number of important exceptions, the commission approved the proposed increases on LCL shipments which were put into effect on November 11, 1958. The proposed increases in express carload traffic were not found to be justified.

On November 21, 1958, REA filed tariffs reflecting an increase of 3.5 per cent in all express rates and charges except charges for refrigeration and rates and charges on carload traffic, milk and cream, newspapers, and human remains. The new tariffs, which were to become effective January 1, 1958, were suspended by the commission on December 30, 1958, pending investigation.

As a result of increases in rates and fares, average unit revenues in 1958 showed fractional increases.

Average revenue per ton-mile for the year 1958 approximated 1.475 cents, up about 2 per cent over the 1957 average of 1.445 cents, and just under the all-time high of 1.478 cents per ton-mile realized in 1953.

Revenue per passenger-mile in 1958 averaged about 2.880 cents, an advance of 1.4 per cent over the 1957 average. The 1958 average was higher than that of any of the past 30 years, but it was below the averages of a series of years prior to 1928.

Railroad unit revenues have failed to reflect fully the increases which have been authorized in rates and fares, a fact which may be attributed, in part, to changes in consist of traffic, selective rate and fare reductions, and failure or lag in securing corresponding authorizations on some intrastate traffic.

Employment and Wages

Under the impact of declining business and the vital necessity of the carriers to keep expenses within limits of income, employment of Class I railroads declined to an average of 841,100 during 1958. Average 1958 employment was about 15 per cent below that of 1957, and was the lowest average in 60 years.

The aggregate payroll in 1958 was approximately $4,880 million, about the same as 1954 when employment was 26 per cent greater than in 1958.

Straight-time rate of pay of railroad employees averaged $2.47 in 1958, an increase of 19 cents over the average during 1957. Annual earnings in 1958 averaged about $5,800 per employee. Both hourly rates and annual earnings stood at new peaks.

Under provisions of the industry's three-year term agreements effective from November 1, 1956, a cost-of-living wage adjustment of 4 cents per hour was made effective May 1, 1958; and November 1 another upward cost-of-living adjustment of 1 cent per hour in addition to a general increase of 7 cents per hour. The full impact of the wage rate increases made effective in 1958 places the current average straight-time rate at $2.55 per hour and average straight-time earnings at $2.70 per hour.

The minimum railroad wage rate generally effective at the end of 1958 was $1.97 per hour, $15.76 for an

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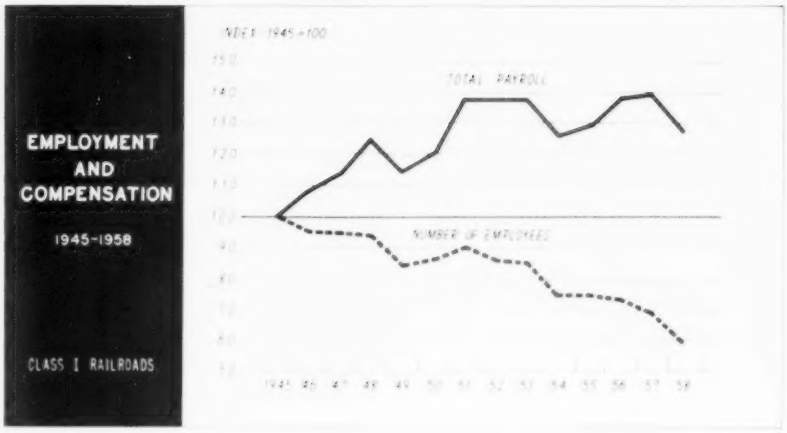


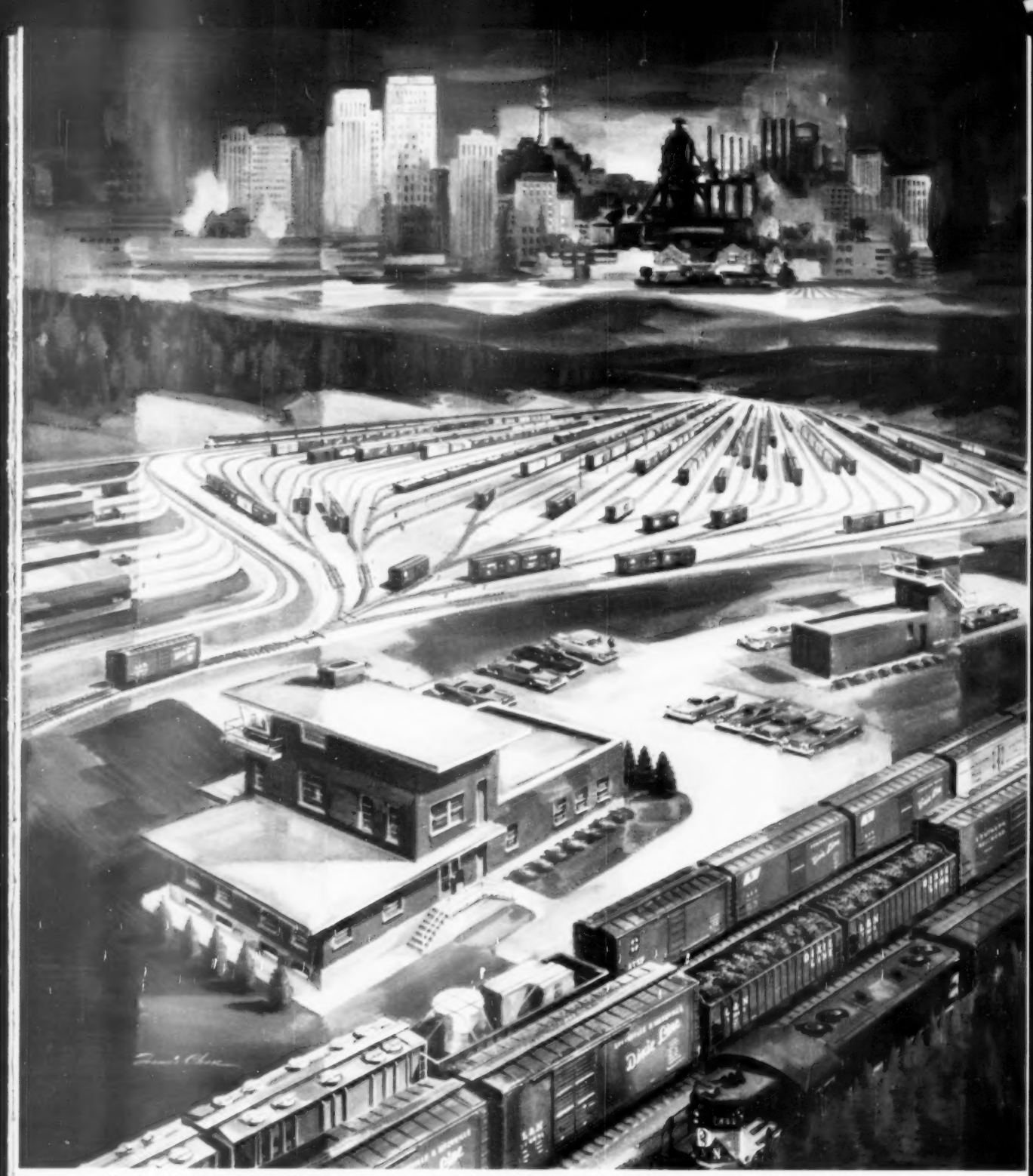
Table 3: Revenue Per Unit of Traffic: 1949-1958

Year	Per ton-mile (cents)	Per passenger-mile (cents)
1949	1.339	2.452
1950	1.329	2.561
1951	1.336	2.601
1952	1.430	2.664
1953	1.478	2.660
1954	1.420	2.620
1955	1.370	2.604
1956	1.384	2.684
1957	1.445	2.841
1958 (est.)	1.475	2.880

Table 4: Employees and Their Compensation: 1940-1958

Year	Average number of employees	Total payroll (thousands)	Avg. annual earnings of employees	Average straight time hourly	
				Rate	Earnings
1940	1,026,956	$1,964,481	$1,913	$0.74	$0.77
1945	1,420,266	3,859,907	2,718	0.93	0.97
1950a	1,220,784	4,620,518	3,785	1.58	1.65
1951a	1,276,000	5,336,198	4,182	1.76	1.84
1952a	1,226,663	5,338,175	4,352	1.84	1.94
1953	1,206,312	5,326,316	4,415	1.89	1.99
1954	1,064,705	4,855,100	4,560	1.94	2.05
1955	1,058,216	4,993,662	4,719	1.96	2.08
1956	1,042,664	5,324,672	5,107	2.13	2.25
1957	986,001	5,358,044	5,434	2.28	2.42
1958b	841,100	4,880,000	5,800	2.47	2.62

a Includes retroactive wage increases paid in subsequent years.
b Partially estimated.



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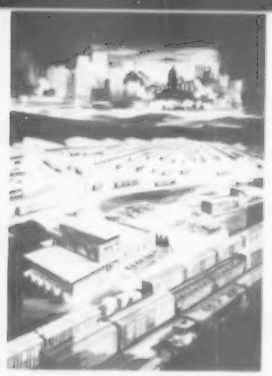

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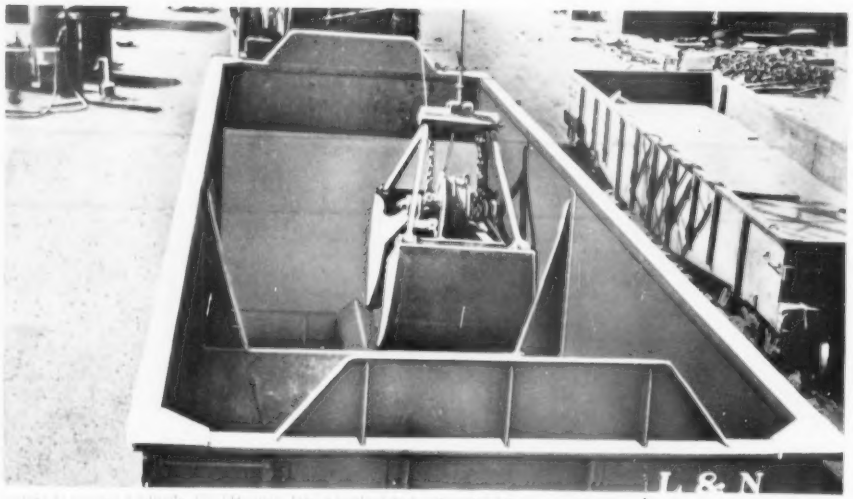

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(Continued from page 68)

eight-hour day, $78.80 for a 40-hour week, and a straight-time minimum monthly wage of $342.78.

In addition to wages for work performed, railroad payrolls include vacation pay, holiday pay for certain employees, and various other allowances for time not actually worked. These added payroll costs, together with overtime premiums, constructive allowances, and hours paid for in train and engine service in excess of time actually worked, brought total payroll in 1958 to about $2.89 per hour actually worked, or 42 cents per hour more than the $2.47 average straight-time rate of pay.

Railroads also provide unemployment and sickness benefits for all employees, hospital and medical insurance for nonoperating employees and their dependents, and they share equally with their employees the cost of the federally administered retirement system. Such employment costs not included in reported compensation of employees amounted in 1958 to about 28 cents per hour actually worked, bringing total employment costs of the railroads in 1958 to $3.17, or 70 cents more than the average rate of straight-time pay. As a result of further increases in labor costs currently in effect, total hourly employment costs now approximate $3.25 per hour worked.

Prices and Wage Rates

After seven consecutive years of continuous rise, the index of railway material prices turned slightly downward in 1958. Led by a decline in fuel prices, the quarterly spot price index compiled by the Bureau of Railway Economics dropped from an all-time high on July 1, 1957, when it stood at 144.0 based on mid-year 1947-1949 prices, to 138.7 on July 1, 1958. Thereafter, the index again turned upward, reaching 141.6 on October 1, 1958.

For materials other than fuel, the decline was a small one, from a peak of 154.2 in October 1957 to 152.9 in July 1958. This index then advanced to a new all-time high of 155.4 on October 1, 1958.

The quarterly indexes, which reflect prices at time of purchase, are converted by the bureau into annual chargeout indexes, which allow for the lag between purchase and use and thus reflect the original cost of materials consumed during the year. This chargeout index is in turn combined with an index of wage rates to measure the overall trend in unit prices and wages.

As shown by Table 6, the preliminary index of chargeout prices fell 1.2 points in 1958 to 141.4 (based on the 1947-1949 average as 100) from a peak of 142.6 in 1957. The index of wage rates, however, moved upward from 174.4 in 1957 to 187.0 in 1958, a new high; and the combined index of chargeout prices and wage rates also reached a new peak of 173.3.

While the combined index of unit prices and wages in 1958 was up 73 per cent over the 1947-1949 average, unit revenues were up only 21 per cent and 25 per cent, as measured by revenue per ton-mile and per passenger-mile, respectively.

Table 5: Railway Material Price Index: 1939-1958

(Mid-Year 1947-1949=100)

Month	Materials and supplies (other than fuel)	Fuel (oil & coal)	All materials including fuel
December 1939	55.5	47.5	52.6
December 1945	72.1	69.3	71.1
October 1950	113.8	104.9	110.4
October 1955	141.6	110.1	130.2
October 1956	149.5	119.0	138.3
October 1957	154.2	123.5	142.9
January 1958	153.6	121.4	141.9
April 1958	153.5	115.8	139.9
July 1958	152.9	112.7	138.7
October 1958	155.4	116.8	141.6

Table 6: Material Prices and Wage Rates: 1939-1958

(Average 1947-1949=100)

Year	Chargeout prices for all materials including fuel	Wage rates (all employees)	Material prices & wage rates combined
1939	52.0	56.5	55.2
1945	69.3	71.2	70.6
1950	105.7	120.5	116.1
1955	126.1	150.0	142.8
1956	134.2	162.4	153.9
1957	142.6	174.4	164.9
1958p	141.4	187.0	173.3

p Preliminary

Financial Results

The severe recession in railroad traffic in 1958, together with substantially higher unit costs and only minor increases in rates and fares, caused earnings of the Class I railroads to fall alarmingly, especially in the first half of the year. The first six months of 1958 saw decreases of 13.5 per cent in gross revenues, 48.3 per cent in net railway operating income, and 64 per cent in net income under the corresponding period of 1957. Gradual revival of traffic and continuation of economy measures instituted early in the year brought about improved earnings in the last half of 1958, but left the year's totals at relatively low levels.

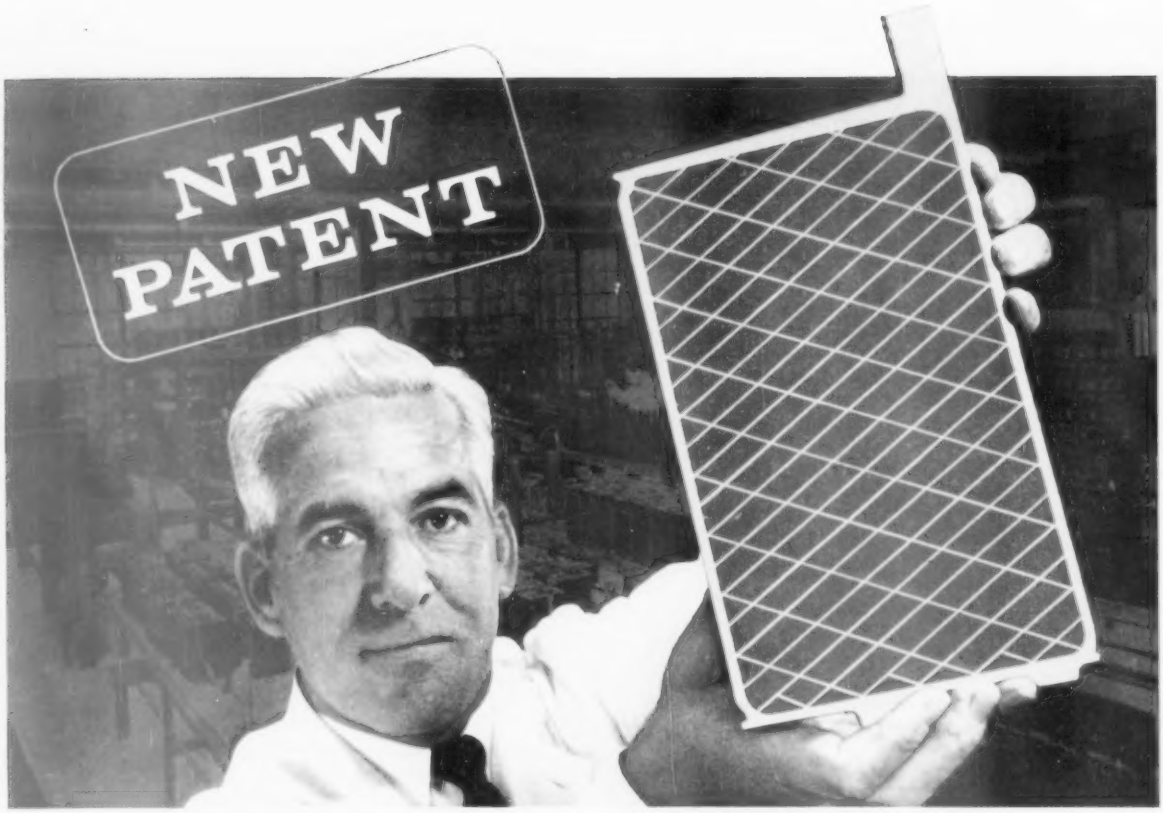
Net railway operating income for the full year 1958 is presently estimated at $750 million, down nearly one-fifth from the 1957 total of $922 million. This level of earnings would provide a rate of return on net investment of 2.75 per cent. Net income after fixed charges is expected to be about $590 million, off about 20 per cent from the $737 million net income earned in 1957 and one-third less than the $876 million net of 1956.

In the 11 months of 1958 for which actual returns are now in, operating revenues showed a decline of $954 million, or 9.9 per cent, under those of the corresponding 1957 period. Operating expenses, however, were reduced by only $666 million, or 8.8 per cent, and the operating ratio was thus raised to 78.94 per cent.

Further analysis of the 11-month income account shows taxes down by $135 million, including reductions of $101 million in federal income taxes, $26 million in payroll taxes and $8 million in other taxes. The drop in income taxes was the natural result of less taxable income, while the decrease in payroll taxes resulted from a reduction in employment which more than offset an increase from 8.25 per cent to 8.75 per cent in the applicable payroll tax rate.

After payment of operating rents, which were up by $27 million in the 11-month period, there remained $684

(Continued on page 73)



The New *gould* SILCONIC Plate Lengthens Battery Life 10-25%

Two distinct improvements:

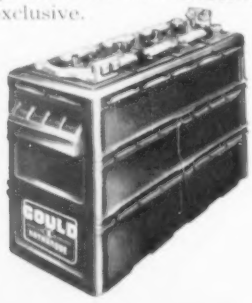
1. Gould has developed a new patented (July 1958) process for introducing Silver-Cobalt into the active materials of the positive plates of Motive Power Batteries.

The temporarily soluble silver-cobalt sulphates, when added to the active materials, migrate to all positive grid members.

The Sulphates collect on the grid members to form an insoluble oxide surface or protective sheath which is impervious to acid and oxygen attack.

2. In order to insure a homogeneous grid completely free of flaws, a carefully determined amount of arsenic is added to the regular metal. This produces a smooth flowing metal during the casting operation which results in an extremely dense and uniform grid.

By selectively adding the silver-cobalt and arsenic to the plate, Gould is able to produce the new *SILCONIC* positive plate . . . a Gould exclusive.



Gould Diesel Starting Batteries with New Silconic Plates resist corrosion, hold their charge, and last longer.

HOLDS CHARGE LONGER. In those applications where batteries are idle for periods of time the *SILCONIC* Plate is ideal. This Silver-Cobalt coating prevents migration of materials to the negative plate, effectively reducing self discharge within the cell.

MIGRATION OF SILVER-COBALT ATOMS. The migration of Silver-Cobalt atoms continues throughout battery life, offering continuous resistance to the corrosive attack of acid and oxygen. This continuous effect is the result of a solid state migration of the Silver-Cobalt which penetrates deeper and deeper into the grid metal during battery operation, thus prolonging the life of the *SILCONIC* Plate.

LONG-FULL SHIFT OPERATION ASSURED. Comparative tests between *SILCONIC* and conventional plates prove that the *SILCONIC* Plate maintains maximum capacity for a considerably greater portion of its service life, retards the tendency toward grid growth, assures longer full shift operation of batteries.

Write for complete data or call your local Gould representative. He's listed under "Batteries Industrial" in the yellow pages. Gould-National Batteries, Inc., Trenton 7, N. J.

More Power to you from Gould

(Continued from page 71)

million of net railway operating income. This was less by $180 million, or nearly 21 per cent, than earnings for the corresponding period in 1957. Net income, calculated after deduction of fixed charges and after allowance for other miscellaneous charges and credits, was about $511 million in the first 11 months of 1958, compared with $664 million in the 1957 period. Net income in 1958 was benefited by about $33 million in mail pay applicable to prior years which was credited to "other income" and thus was not included in operating revenues or net operating income of 1958.

Except for mail revenue, which was benefited by increased rates of mail pay applicable in 1958, all principal categories of operating revenues declined. Freight revenue, which accounted for 85 per cent of all operating revenues, was down by $879 million in the first 11 months of 1958, and thus accounted for about 92 per cent of the total revenue decrease of $954 million. Passenger revenue showed a decline of $62 million, or 9.2 per cent, while mail revenue increased $37 million, or 14.7 per cent, reflecting higher rates of mail pay made effective in mid-1957 in the South and West, and in 1958 in the East. Express revenue received by the railroads was off by $8 million, or 9.1 per cent, in the 11-month period. All other revenues were off by $43 million, or 10.6 per cent.

All categories of operating expense were down in the first 11 months of 1958 under the similar period of the previous year. Maintenance of way and equipment expenses were off 14.9 per cent and 10.6 per cent, respectively, transportation expenses decreased by 6.9 per cent, and all other categories combined were down by 3.3 per cent. The increase in the overall operating ratio for the period from 78.04 per cent in 1957 to 78.94 per cent in 1958 was chiefly due to a rise in the transportation ratio, which went from 38.8 per cent of revenues in the 1957 period to 40.0 per cent in 1958. Total maintenance expenses amounted to 30.9 per cent of revenues in the 1958 period, down slightly from the comparable 1957 ratio of 31.8 per cent.

The year 1958 witnessed a further decline in the railroad industry's rate of return on net investment. The estimated return of 2.75 per cent, if realized, will not only be lower than that of any other of the 10 years shown in Table 10, but will be the lowest return earned in any year since 1946. If the rate of return falls as low as 2.74 per cent it will be the worst showing since 1939's average of 2.56 per cent.

In computing rates of return, net investment is stated in terms of original cost, less recorded depreciation and amortization. Thus, comparisons of current rates of return with those of prior years make no allowance for increased present value of railroad properties. Such an allowance would substantially reduce current return rates.

One of the alarming signs of deterioration in the railroad financial situation in late 1957 and early 1958 was the dwindling supply of working capital. From $934 million at the close of 1955, net working capital fell to $684 million at the close of 1956, to $555 million in December 1957, and the decline continued in 1958, reaching a low of $326 million on March 31, 1958. By virtue of a tight control on expenditures, this margin began a gradual rise in the second quarter of the year, and was aided in the third quarter by the award of back mail pay to the Eastern roads. On October 31, 1958, net working capital stood at $718 million, an increase of $201 million over the corresponding balance on October 31, 1957.

Table 7: Condensed Income Account, 11 months, 1956-1958

	1956 (millions)	1957 (millions)	1958 (millions)
Total operating revenues	$9,675	$9,680	$8,726
Total operating expenses	7,413	7,554	6,888
Operating ratio (per cent)	76.62	78.04	78.94
Taxes	1,047	1,012	877
Net railway operating income	984	864	684
Rate earned (per cent) a	3.95	3.36	2.75
Net income after charges	783	664	511

a Rate of return on net investment for full calendar year (1958 estimated).

Table 8: Operating Revenues, 11 months, 1956-1958

	1956 (millions)	1957 (millions)	1958 (millions)
Freight	$8,226	$8,264	$7,386
Passenger	685	670	608
Mail	253	252	289
Express	107	87	79
All other	404	407	364
Total	$9,675	$9,680	$8,726

Table 9: Operating Expenses, 11 months, 1956-1958

	1956 (millions)	1957 (millions)	1958 (millions)
Maintenance of way	$1,298	$1,321	$1,125
Maintenance of equipment	1,737	1,759	1,573
Transportation	3,682	3,752	3,492
Traffic, general & other	696	722	698
Total	$7,413	$7,554	$6,888

Table 10: Rate of Return: 1949-1958

Year	Net railway operating income (millions)	Rate of return on investment after depreciation
1949	$686	2.88%
1950	1,040	4.28
1951	943	3.76
1952	1,078	4.16
1953	1,109	4.19
1954	874	3.28
1955	1,128	4.22
1956	1,068	3.95
1957	922	3.36
1958 (est.)	750	2.75

Capital Expenditures

In order to conserve a dwindling sup-

(Continued on page 75)

PERMANENT CURE FOR SOFT SPOTS . . .

SEABOARD FINDS THE ANSWER IN PRESSURE GROUTING

Seaboard Air Line Railroad began their program of pressure grouting with portland cement in 1946. Water pockets and soft spots in roadbeds had been major sources of trouble. On many of the curves, slow orders were necessary during every wet spell. Maintenance crews had to be sent back to the same trouble spots time after time.

Seaboard's grouting program has paid off and the cost has been low. Previously unstable track now requires little or no maintenance. Schedules are maintained, no matter what the weather. Every division has its own grouting outfit and uses it to cut down maintenance costs. It's just one of the many important ways that progressive railroads are using portland cement and concrete to build for economy . . . for durability . . . for better service.

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

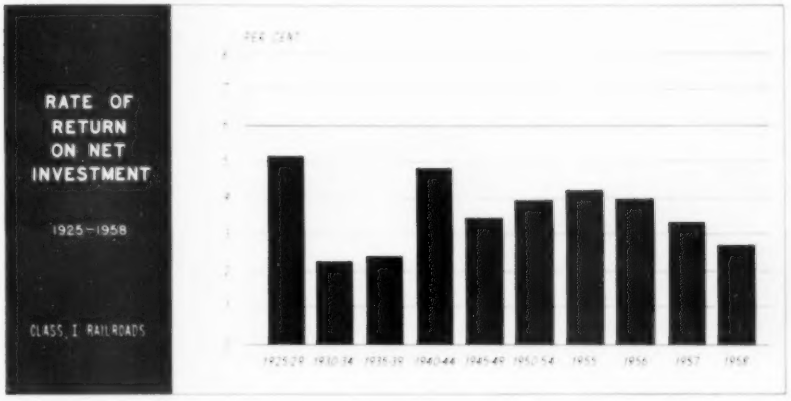
(Continued from page 73)

ply of cash, railroads found it necessary in 1958 to curtail expenditures of all kinds. Capital improvement programs were limited to a large extent to those carried over from 1957, and inventories of materials and supplies for current operation showed a continuing decline throughout the year.

From a near-record total of $1,394 million spent in 1957, capital expenditures of the railroads for additions and betterments dropped by more than 45 per cent in 1958 to an estimated $740 million. The 1958 total was lower than in any other post-war year since 1946; and, in terms of constant dollars—adjusted for price inflation—the 1958 expenditures were the lowest for any year since 1939.

Equipment expenditures accounted for the greater part of the decline in capital spending in 1958 under 1957. About $480 million were spent for additions and betterments in the equipment accounts, a decrease of more than 50 per cent under the comparable 1957 total of $1,008 million. Roadway expenditures were down nearly one-third from $386 million to about $260 million.

Purchases of fuel and other materials and supplies in 1958 also dropped sharply from a total of $1,816 million in 1957 to an estimated $1,300 million in 1958, a decline of some $500 million or nearly 30 per cent. The decline reflected a generally lower level of operations and maintenance in 1958, as well as the trimming of about $100 million from material and supply inventories.



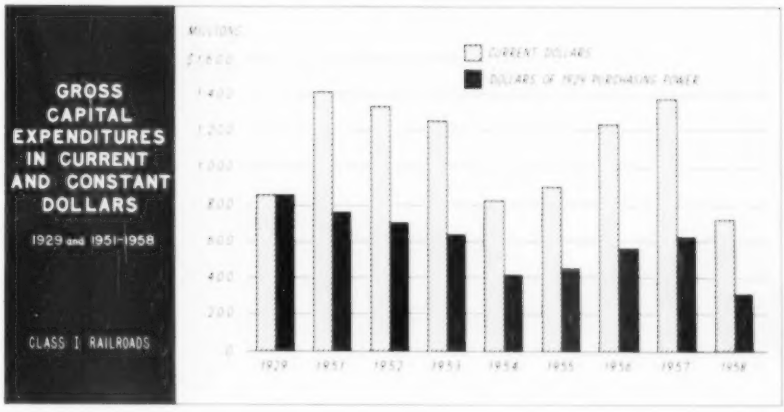


Table 11: Capital Expenditures and Purchases: 1949-1958

Year	Gross capital expenditures (thousands)	Purchases of fuel, materials & supplies (thousands)
1949	$1,312,200	$1,641,406
1950	1,065,842	1,739,908
1951	1,413,995	2,175,859
1952	1,340,912	1,817,750
1953	1,259,797	1,920,481
1954	820,246	1,424,761
1955	909,521	1,637,075
1956	1,227,857	1,883,848
1957	1,394,261	1,816,471
1958 (est.)	740,000	1,300,000

Equipment Trends

The consequences of curtailed spending of railroads in 1958, both for maintenance and capital improvements, were reflected in equipment statistics for the year. With the decline in installation of new equipment, ownership trends of both cars and locomotives were downward, while bad order ratios turned upward. The result was a general tightening of the equipment supply.

In view of rising trends in the economy and predictions of a higher level of business activity in 1959, concern was expressed in some quarters about the apparent deterioration of the equipment situation. It appeared at year-end, however, that with resumption of heavy repair programs and new car building in railroad shops, and with builders in a position to insure 1959 delivery of equipment on order or to be ordered in early 1959, railroads should be able to effect a substantial increase in the equipment supply by the time of heavy seasonal demand in the year ahead. Ability of the roads to carry out these programs will, of course, depend upon continued improvement in their earnings.

Much will depend, also, on the success or failure of legislative proposals which would provide for depreciation rates to reflect more realistically the economic life of railroad property, and would provide for deferral of income taxes on earnings reinvested in capital improvements.

Freight cars. Freight car ownership showed virtually no change in the first six months of 1958, but with decreased installations and increased retirements in the last half of the year, ownership of the Class I railroads by year's end was down to approximately 1,725,000, a drop of more than 20,000 for the year. Meanwhile, as a result of curtailment of repair activity, the number of cars awaiting repairs rose to the highest level since before World War II. On December 1, 1958, the number of bad order freight cars stood at 145,731, equivalent to 8.4 per cent of ownership, as compared with a bad order count of 89,893 cars, or 5.1 per cent of ownership at the close of 1957. Thus, with ownership down and bad

(Continued on page 78)

Now in Piggy-Back Service

88-ft. Flat Cars

Longest flat car in rail service, this 88-footer is one of a fleet designed and built by Santa Fe to haul two 40-foot Piggy-Back trailers.

Latest advancement in T-O-F-C operations is the new 88-foot flat car designed by Santa Fe to give shippers more efficient service and to help meet demands for moving a greater volume of Piggy-Back traffic.

Santa Fe's Piggy-Back service provides modern van type trailers that can be equipped with portable heaters and coolers, deep freeze trailers, also open top trailers. Red Ball tracing service, police protection of cargoes, expedited schedules . . . and now giant flat cars are added to the fleet of rail equipment that keeps Piggy-Back on the move over the Santa Fe.

Santa Fe

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The repeat business which we have enjoyed through the years proves the value of our service and prompts our slogan.

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RAIL GRINDING

(Continued from page 75)

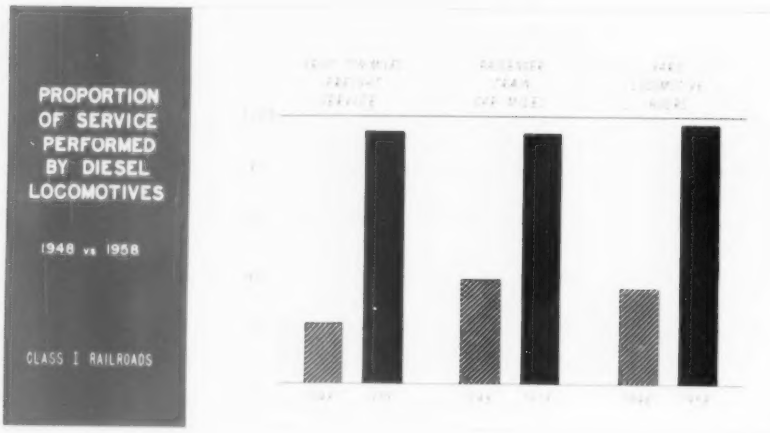

Table 12: Ownership Trends—Cars*: 1952-1958

Year	Ownership at end of year	New cars installed during year	New cars on order at end of year
		Freight cars	
1952	1,756,700	63,748	67,138
1953	1,776,017	67,548	27,678
1954	1,735,553	28,405	13,624
1955	1,694,097	35,738	135,293
1956	1,707,683	59,768	103,535
1957	1,746,684	88,482	57,490
1958 (est.)	1,725,000	38,500	30,000
		a Passenger-train cars	
1952	42,167	200	420
1953	40,755	348	449
1954	38,875	389	396
1955	37,597	444	394
1956	35,636	411	252
1957	34,219	191	143
1958 (est.)	33,000	110	40

* As reported to Car Service Division, AAR.
a Includes Pullman Company.

Table 13: Ownership Trends—Locomotives: 1952-1958

Year	Diesel electric (units)	Steam	Electric and other (units)	Total (units)
		Ownership at end of year		
1952	20,492	16,078	773	37,343
1953	22,503	11,787	719	35,009
1954	23,531	8,650	691	32,872
1955	24,786	5,982	661	31,429
1956	26,081	3,714	638	30,433
1957	27,186	2,447	615	30,248
1958 (est.)	27,600	1,300	550	29,450
		New units installed during year*		
1952	3,038	19	8	3,065
1953	2,091	15	4	2,110
1954	1,097		16	1,113
1955	1,172		10	1,182
1956	1,445		8	1,453
1957	1,312		4	1,316
1958 (est.)	400		10	410
		New units on order at end of year*		
1952	914	15	29	958
1953	546		25	571
1954	483		10	493
1955	827		27	854
1956	780		34	814
1957	413		30	443
1958 (est.)	380		20	400

*As reported to Car Service Division, AAR.

orders up, the supply of serviceable freight cars fell by about 75,000 cars, the lowest point since July 1941.

Despite the lower level of freight traffic, car shortages of significant proportions developed in the heavy loading periods of the year, reaching a peak shortage of 7,495 cars per day in the week ended October 18, 1958. The maximum shortage reported in 1958 substantially exceeded that of any 1957 week, but was less than half the maximum shortage reported in 1956.

The backlog of freight cars on order declined in each of the first ten months of 1958, then turned upward in November and December, as improved earnings and the prospect of a continued rise in traffic resulted in a light year-end flurry of equipment orders.

Passenger cars. Ownership of passenger-train cars in 1958 followed the downward trend of passenger-train operations generally. New car installations and new orders were at postwar lows, and the small number of cars on order at the year's end was accounted for almost entirely by one railroad. It is presently estimated that final returns will show about 33,000 passenger-train cars remaining in the ownership of Class I railroads and the Pullman Company, a reduction of some 1,200 cars during the year. Continuing the trend of other recent years, most of the decline was in the category of passenger-carrying cars.

Locomotives. Owing to the lower level of traffic in 1958, it required the installation of only about 400 new diesel locomotive units—the smallest number installed in any year since 1940—to virtually eliminate the steam locomotive from the railroad scene. By the close of the year, only about 1,300 steam locomotives remained on the rails, and most of these were either unserviceable or stored. For the year as a whole, steam locomotives handled less than two per cent of the gross ton-miles in freight service, accounted for about one per cent of yard engine hours, and handled only about one-half of one per cent of all passenger-train car-miles.

As shown by Table 13, an increase of about 400 units in diesel ownership offset only partially a decline of about 1,200 in the steam and electric columns, leaving an overall loss of 800 in total number of units owned at the end of the year. Despite this decline, there was an adequate supply of motive power to take care of available traffic throughout the year. Stored serviceable locomotives on October 1, 1958, totalled 1,265, including 654 diesel units,

(Continued on page 84)

An Advancement

"In Cutout Cocks"

- **PERMANENTLY LUBRICATED**
  TEFLON Lubrication will not dry or be carried away.*
- **LOW OPERATING TORQUE**
  Will lessen failures due to misuse.
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  Conforms to slight irregularities, eliminates leakage.
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  Chemically inert and not subject to corrosion.
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  Permanent lubrication greatly reduces contamination.
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  TEFLON coating provides minimum wear, greater life.*
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LEADERS IN RAILWAY APPLIANCE PROGRESS

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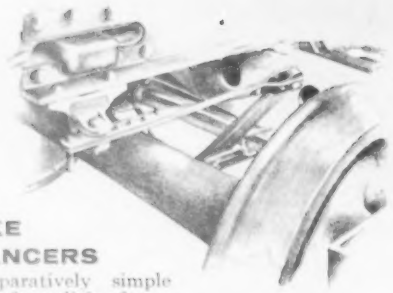
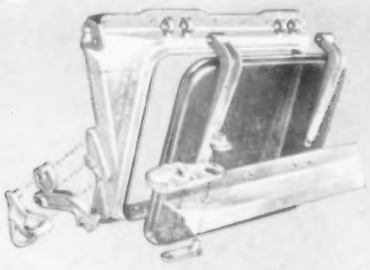
The nation's railroads are noted for many great transportation achievements . . . one of the most important being the efficient handling of the country's heavy bulk freight.

Since 1912, The Wine Railway Appliance Company has designed and manufactured many of the important parts of hopper, gondola, flat and box cars that make this handling function possible, as well as profitable, for the owners and users of the cars. In the years ahead, Wine will continue, through its experience, engineering know-how, and manufacturing skills, to keep pace with the needs of the railway industry.



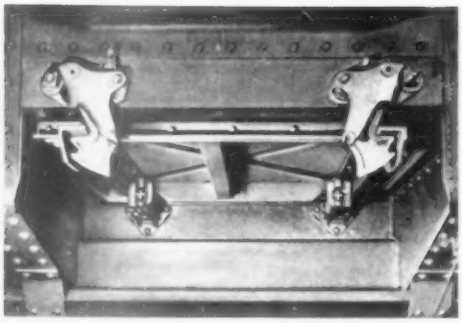
BRAKE BALANCERS

A comparatively simple method of equalizing forces and "balancing" the conventional brake arrangement by replacing the dead lever connection to the truck bolster with the Wine Balancer—connected to the car underframe. A bracket and connector at each end of the center sill flange, engaging the dead lever, balances the brake forces by returning them to the underframe of the car.



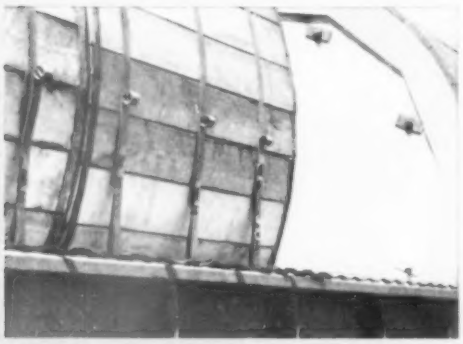
CORRELATED HOPPER UNITS

The one-piece, cast steel frame unitizes each individual hopper into a structurally sound, functional assembly which assures positive door fit. The adjustable locks, cast steel hinges, and symmetrical tapered door flange make possible the *only* adjustable door fit permitting compensation for wear or common irregularities of construction. "Balanced" unloading is assured by dual door operation and a method of controlled flow.



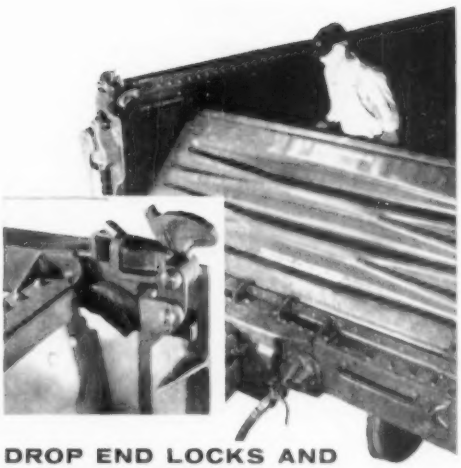
DROP BOTTOM SPRING HINGES AND ADJUSTABLE LOCKS

Drop Bottom Gondolas equipped with these two Wine products provide the shipper and receiver of the lading with a positive closure and afford a fast, economical one-man operation, with selective single or multiple opening of doors.



CONTINUOUS LADING BAND ANCHOR

Wine's continuous offset bar for top-coping applications provides a secure anchor for lading bands every 7½" of its entire length. Permits the use of all types of banding material.



DROP END LOCKS AND END BALANCERS

The *complete* drop end combination from operating and security standpoints! Interlocked corners provide rigidity to keep the sides from spreading under load. The balancer incorporates the hinge function . . . permits a one-man, time and labor saving closure.

UNIVERSAL LADING BAND ANCHORS

Easily applied on all flat cars and gondolas, the Wine Universal Type Anchor features 360° rotation for tie-ins from any direction. Versatility of use permits welding on coping at important locations as well as mounting in the floor. Drop flush when not in use.

ADJUSTABLE HOPPER DOOR LOCKS

The adjustment feature allows compensation for construction differences and readily permits adjustments necessitated by wear. Wine Adjustable Hopper Locks are adaptable to built-up, structural hopper openings as well as cast steel frames.

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by Hungerford

Portrait by Edith Sherman

"Big job of automation still remains for the railroads,"

says W. Wendell Reuss, Manager, Railroad Securities Department, W. E. Hutton & Co., New York City, N. Y.

"Automation in the form of Centralized Traffic Control has been widely accepted by the nation's railroads. But much C.T.C. installation, with its resultant cost savings, still lies ahead. And the 'surface has only been scratched' in the utilization of cost-cutting automatic yards."

Now—as in the past—Union Switch & Signal leads the way in this "push-button revolution." Union is working continually to develop better traffic control equipment and improved yard systems designed to give you the benefits of even more automation.

You are already familiar with the way traffic control and automatic yards reduce railroad operating expenses, promote efficient, reliable service, and increase man-hour production. If you are interested in multiplying these advantages many times over, get in touch with Union Switch & Signal soon.

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(Continued from page 78)

compared with a total of 852, including 105 diesels, stored serviceable on October 1, 1957.

Although the supply of motive power was adequate to meet requirements of the recession year 1958, there remained some question as to the adequacy of supply in the event of a substantial increase in traffic in 1959.

Operating Efficiency

Depressed traffic volume adversely affects statistical averages designed to show advances in efficient and economic use of the railroad plant, as the railroad industry relies heavily on traffic volume to realize its inherent economic potential.

In 1958, however, efficiency factors were maintained at relatively high levels despite traffic declines. This accomplishment was made possible by plant improvements and technological advances, including operation of more powerful locomotives, laying of heavier rail in tracks, improved communications and signaling systems, modernized classification yards, and many others.

Operating statistics for the first nine months of 1958 show little retrogression, and even show improvement in some important categories.

Table 14 shows four important freight-train operating averages, namely train speed, load per car, load per train, and ton-miles per train-hour. The last named average which combines both weight and speed, has set a new record in each of the past twelve years. Freight-train speed also appears to have reached a new high, while average load per train and per car declined slightly in the first three-quarters of the year.

Passenger service performance averages in 1958, as shown in Table 15, just about held their own with those of 1957. Train speed and car-miles per train-hour during the first nine months of 1958 were identical with those for the year 1957, and may be even higher by the year's end. Passenger-miles per car-mile were higher in the 1958 period than in any year since 1948, due in part, no doubt, to the curtailment of passenger service on some light-traffic runs.

Car-miles per train-mile show little change.

Daily mileage per active locomotive, shown in Table 16, declined somewhat in 1958, reflecting a more adequate supply of motive power than in the two previous years. In freight service, the 140.1 miles per locomotive per day for the nine-month period of 1958 was 6.1 miles under the 1957 average and 10.1 miles under the 1956 record of 150.2 miles. In passenger service, the average of 335.1 miles for the first nine months of 1958 was only 4.1 miles under the record 339.2 miles averaged in 1957.

Despite these declines, the average active freight locomotive in 1958 performed 21 per cent more mileage each day than was run by locomotives in the first post-war year of 1946. At the same time, the average for passenger locomotives was up more than 50 per cent.

Mileage per day for serviceable freight cars declined sharply. The 42.8 mile average for the first nine months of 1958 was 4.2 miles under 1957 and represented a lower level of freight car activity than that realized in any full year since 1940.

Table 14: Freight Service Averages: 1946-1958

Year	Average train speed (m.p.h.)	Net ton-miles: Per loaded car-mile	Net ton-miles: Per train-mile	Gross ton-miles per train-hour
1946	16.0	31.3	1,086	37,057
1949	16.9	31.4	1,138	42,346
1952	17.6	32.5	1,296	49,113
1956	18.6	33.0	1,422	57,071
1957	18.8	33.4	1,439	59,186
1958 (9 mos.)	19.1	32.9	1,421	60,695

Table 15: Passenger Service Averages: 1946-1958

Year	Average train speed (m.p.h.)	Passenger-miles per car-mile	Car-miles per train-mile	Car-miles per train-hour
1946	35.5	24.7	9.5	338
1949	37.0	18.0	9.2	341
1952	38.3	18.1	9.8	375
1956	40.0	18.1	9.9	397
1957	40.2	18.1	9.8	392
1958 (9 mos.)	40.2	18.5	9.7	392

Table 16: Daily Mileage, Locomotives and Cars: 1946-1958

Year	Active freight locomotives	Active passenger locomotives	Serviceable freight cars
1946	115.9	221.8	45.2
1949	112.5	228.5	42.9
1952	126.8	266.1	46.2
1956	150.2	326.5	48.3
1957	146.2	339.2	47.0
1958 (9 mos.)	140.1	335.1	42.8

Legislation

The second session of the 85th Congress was most active in matters relating to transportation. Important legislation enacted or considered is outlined below.

Transportation Act of 1958. The most important transportation legislation enacted by the second session of the 85th Congress was the Transportation Act of 1958, which became Public Law 85-625 on August 12, 1958. While this Act was not the comprehensive overhaul of national transportation policies that is needed, the legislation and the hearings pertaining thereto reflect an increasing recognition of transportation problems that must soon be resolved in the public interest. The Act makes a constructive start by dealing with some important facets of the transportation situation which Congress found to require immediate action.

Three of the provisions of the new Act have to do with competitive transportation matters. Among these, perhaps the most important is that prescribing a new rule of **competitive rate making** for application by the ICC as between the several modes of transportation subject to the Interstate Commerce Act.

Until there has been some experience with the new rule laid down by Congress, its effects in the circumstances of particular cases will be somewhat uncertain. In recent months a number of reduced rates proposed by the railroads have been suspended by the commission for investigation. However, since in principle the mandate from Congress is clear, over a period of time the application of the new competitive rate rule should bring increased traffic and revenues to the railroads by enabling them to assert to a greater ex-

(Continued on page 86)

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(Continued from page 84)

lent than heretofore the inherent advantages of rail transportation in competition with trucks and barges.

In another provision of the 1958 Act bearing on competitive transportation, the Interstate Commerce Act was amended so as to correct certain abuses by which commercial transportation for hire has been conducted by motor vehicle under the guise of **private carriage.** This provision, by writing into law the familiar "primary business test," is designed to check "buy and sell" activities and similar devices for evading economic regulation.

The third competitive matter treated to a partial extent in the 1958 Act is a provision which redefines and limits the scope of the so-called **agricultural commodities exemption** for motor carriers in Part II of the Interstate Commerce Act. While very broad exemptions still remain for further consideration, the principal effect of the amendment is to "freeze" their scope by halting the continuing process of judicial construction by which its application has been extended far beyond the original purpose of the Motor Carrier Act of 1935.

Two troublesome problems of regulatory lag which have been burdensome to the railroads also are dealt with in the Transportation Act of 1958.

As to the first, the Interstate Commerce Act has been so amended as to make more effective the authority of the ICC to remove discrimination against or burden upon interstate commerce found to result from lower levels of **intrastate rates.**

Although the ICC for many years has had authority to require adjustments in intrastate rates to remove unlawful discrimination against interstate commerce, for reasons of comity it has exercised the power hesitantly and has generally withheld action until a final disposition of the matter has been reached at the state level. This situation has afforded opportunity for extreme and costly delays before the protection intended by the Interstate Commerce Act could be realized.

To remedy these conditions, the 1958 Act amends the Interstate Commerce Act to provide that where a petition bringing into issue the lawfulness of any intrastate rate, fare or charge is filed with the commission by the carrier or carriers concerned, the commission shall institute its investigation forthwith and give "special expedition" to a hearing and decision. This procedure is to be followed whether the matter has theretofore been considered by any state agency and without regard to the pendency of any state proceeding thereon.

In this regard the new Act contains a further helpful amendment of the Interstate Commerce Act with respect to the nature of the evidence required to support the commission's finding that intrastate rates, fares and charges cause a discrimination against or a burden on interstate commerce. Such a finding may be made "without a separation of interstate and intrastate property, revenues, and expenses, and without considering in totality the operations or results thereof of any carrier, or group or groups of carriers wholly within any state." It is intended to overcome what might have been the harmful effects of two recent Supreme Court decisions[1] under a feared interpretation of which the commission could not effectively exercise its authority to remove discrimination against interstate commerce.

Another feature of the new Act concerned with regulatory drag involves the very important matter of jurisdiction over the **discontinuance** or change of the operation or service **of trains and ferries.** These provisions are intended to enable the railroads and the ICC to deal more effectively with problems posed by operations and services of trains and ferries that, because of their unprofitable nature, burden interstate commerce.

For the first time the commission is vested with jurisdiction over discontinuance or change of the operation or service of trains and railroad ferries, as distinguished from abandonment of a "line of railroad." There are two separate provisions, one applicable only to trains or ferries operating wholly within the boundaries of a state and the other to those operating across state lines.

In the first case, where a carrier wishes to discontinue or change the operation or service of any train or ferry, but may not do so because of provisions of state law—or because the state regulatory authority has denied permission or has failed to act finally on the carrier's application within 120 days—a petition for authority to effect the discontinuance or change in question may be filed with the commission. After hearing held in the state where the train or ferry is operated, the commission may grant the authority sought if it finds that public convenience and necessity permit the discontinuance or change and that the continued operation or service without discontinuance or change will constitute an unjust or undue burden upon the interstate operations of the carrier or upon interstate commerce.

In the other case, where operations or service across state lines are involved, a carrier whose rights with respect to the discontinuance or change are subject to any state law or regulatory authority will be permitted, but not required, to invoke the commission's jurisdiction upon filing with it thirty days' notice of the proposed discontinuance or change. The carrier may take the action contemplated by the notice unless otherwise ordered by the commission, so that the effect of such filing will be to supersede state jurisdiction.

The commission will have authority, during the thirty-day period, to institute an investigation of the proposed action. If such an investigation is instituted the commission may, by order served at least 10 days prior to the date on which the discontinuance or change would have become effective, require the continued operation or service pending hearing and decision, but not for more than four months beyond the proposed effective date of the discontinuance or change.

But if the commission finds that the operation or service in question is required by public convenience and necessity and will not unduly burden interstate or foreign commerce, it may by order require the operation or service of the train or ferry to be continued or restored for a period not to exceed one year from the date of its order. At the expiration of the period specified in such an order state jurisdiction, if any, will again attach unless the ICC procedure is again invoked.

Finally, as a temporary means of immediate financial relief to railroads, the new Act authorizes the ICC to **guarantee loans** up to an aggregate principal amount of $500 million. The loans may be either for additions and betterments and other capital expenditures or for maintenance of property. Authority to make such guarantees extends to March 31, 1961. To the end of 1958, three railroads had filed applications for loan guarantees, aggregating $29,492,000 in principal amount.

Mostly for the protection of the government, conditions or limitations are provided relative to loan guarantees. No loan is to be guaranteed (1) unless the commission finds that without a guaranty the borrowing railroad would be unable to obtain necessary funds on reasonable terms, (2) if in the judgment of the commission the rate of interest is unreasonably high, (3) if the loan is for a term of more than 15 years, or (4) unless the commission finds that the prospective earning power of the borrowing railroad, together

(Continued on page 88)

[1] Chicago, Milwaukee, St. Paul and Pacific Railroad Co. v. State of Illinois, Jan. 13, 1958, 356 U.S. 906, and Public Service Commission of Utah v. United States, May 19, 1958, 356 U.S. 421.

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(Continued from page 86)

with the nature of the security pledged, if any, furnishes reasonable assurance of ability to repay within the time fixed for repayment and reasonable protection to the United States. Further, in the case of any guaranteed loan made for financing or refinancing expenditures for maintenance of property, there is a prohibition against the declaration of dividends while any principal or interest remains unpaid.

S. Res. 303. Recognizing that the Transportation Act of 1958 would not reach into some basically important transportation problems, the Senate on June 23, 1958, passed S. Res. 303 providing for a broad study of federal transportation policies and related problems. The resolution authorizes the Senate Committee on Interstate and Foreign Commerce or any duly authorized subcommittee thereof to make a complete study of any and all matters pertaining to:

1. The need for regulation of transportation under present-day conditions and, if there is need for regulation, the type and character of that regulation.

2. The area of federal policy dealing with government assistance provided the various forms of transportation and the desirability of a system of user charges to be assessed against those using such facilities.

3. The subject of the ownership of one form of transportation by another.

4. Federal policy on the subject of consolidations and mergers in the transportation industry.

5. Policy considerations for the kind and amount of railroad passenger service necessary to serve the public and provide for the national defense.

6. The problems arising from action by the ICC in permitting the charge of more for a short than a long transportation haul over the same line in the same direction; and

7. Additional matters of federal regulation (and exemption therefrom) and federal promotional policy in regard to the various forms of transportation.

The resolution provides that the committee shall report its findings together with its recommendations for legislation as it deems advisable at the earliest practicable date, but not later than January 31, 1959. Since at the close of 1958 the studies were not yet under way, it seems apparent that if they are to be made an extension of time will be required.

Excise taxes on transportation. Culminating efforts sustained over a period of years, the "emergency" excise taxes on the transportation of property were finally repealed, effective August 1, 1958. Proposals to repeal the excise taxes on both the transportation of passengers and of property were adopted by the Senate, but subsequently the conferees agreed upon a compromise bill that did not include the repeal of the 10 per cent tax on passenger fares.

Amendments to Internal Revenue Code. In the tax field, the Technical Amendments Act of 1958, amending the Internal Revenue Code of 1954 to correct unintended benefits and hardships, was enacted as Public Law 85-866. Section 94 of the Act provides railroads with relief from the 30 per cent reserve requirement which was imposed as an incident to changing from retirement to straight-line depreciation accounting January 1, 1943. At that time, the Commissioner of Internal Revenue had conditioned his approval of straight-line accounting for tax purposes upon the establishment of a reserve of 30 per cent of the cost of the assets involved in the accounting change-over, with the remaining portion of the cost to be recovered by way of depreciation limited to the cost or other basis of the property reduced by the amount of the reserve. Section 94 applies only to those railroads which entered into a so-called "terms letter agreement" with the government at the time of the accounting change-over with respect to the 30 per cent reserve requirement. In general, this provision permits the same amount of deductions as would have been allowed had the railroads at all times used the straight-line method.

Other proposals for the more favorable treatment of depreciation for tax purposes, including the railroad proposal for tax deferrals on income placed in "construction reserve" funds so as to stimulate investment in equipment and other necessary transportation facilities, were not enacted.

Power Brake bill. Public Law 85-375, termed the "Power or Train Brakes Safety Appliance Act of 1958," extends regulation into a new area by authorizing the ICC after hearing to prescribe rules, standards, and instructions for the installation, inspection, maintenance and repair of power or train brakes. Under this law the AAR rules for inspection, testing, repair and maintenance of air brake equipment on locomotives and cars, as revised in July 1957, became effective as the rules of the ICC on August 9, 1958. Subsequent changes in the rules are to be by order of the commission after hearing.

Statutes of limitations for government transportation. To establish the finality of contracts between the government and common carriers of passengers and freight subject to the Interstate Commerce Act, Public Law 85-762 amends that Act and the Transportation Act of 1940 with respect to periods of limitation applicable to actions or claims, including those by or against the United States, for recovery of charges for the transportation of persons or property, and for other purposes.

Railroad Retirement and Unemployment. A number of bills to amend the Railroad Retirement Act, the Railroad Retirement Tax Act and the Railroad Unemployment Insurance Act were introduced but none was enacted.

Certain other measures not enacted. Other bills which died with the adjournment of the Congress included: H.R. 5384 and S. 2129, which would have provided that no through routes for rail carriers could be cancelled or "commercially closed" by tariff adjustments, except by agreement of all carriers parties to the route, unless the ICC upon application and after hearing found that such cancellation or closing would be consistent with the public interest; S. 1729, H.R. 6384 and H.R. 6385, identical bills supported by representatives of railway labor organizations in the name of safety, which would have required that track motor cars and other self-propelled track vehicles be operated under either "operating rules covering the movement of trains" or other rules to be approved and enforced by the ICC; and H.R. 3 and S. 337 which—by providing that no act of Congress should be construed as indicating an intent on the part of Congress to occupy the field in which such act operates, to the exclusion of all state laws on the same subject matter, unless such act contains an express provision to that effect—might seriously have unsettled long-established decisions in the field of regulation of railroads.

Administrative Proceedings

Besides those mentioned in other parts of this review, administrative proceedings and investigations which occurred or were continued in 1958 included the following matters of particular interest:

Passenger deficit investigation. The ICC, by its order dated March 19, 1956, instituted a comprehensive investigation into the passenger-train service deficit and made all passenger-carrying railroads respondents in the proceedings. Extended hearings, at which the railroads and other interested parties made presentations and analyses on many facets of the problem, were concluded on June 23, 1958. The examiner's proposed report, made public on September 18, 1958, in its findings emphasized that the seriousness of the deficit situation and outlook cannot be "conjured away by statistical legerdemain," refuted as "mistaken ideas" accusations that the railroads want to get rid of their passenger busi-

(Continued on page 90)

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(Continued from page 88)

ness regardless of its profitability, and agreed that the railroads "have good reason to believe that the principal underlying cause of their loss of passenger traffic has been the governmental promotion of air and highway transportation by financial and other means." All parties were given until January 2, 1959, to file exceptions to the examiner's proposed report.

Consolidations and unifications. Intensive explorations of the savings that might be attainable from railroad consolidations and joint use of facilities, in some instances started earlier, became a major activity of a growing number of railroads in 1958. Prominent studies that have been announced as looking into the possibilities and problems include the following groups of roads: The Erie, the Delaware and Hudson, and the Delaware, Lackawanna and Western, as a united system to serve New England; the New Haven, the Boston and Maine, the Rutland, the Maine Central, and the Bangor and Aroostook; the two largest present systems in the East, the Pennsylvania and the New York Central; the Atlantic Coast Line and the Seaboard; two of the Pocahontas roads, the Norfolk and Western, and the Virginian; and the Great Northern, the Northern Pacific, the Burlington, and the Spokane, Portland and Seattle.

The accomplishment of railroad mergers and unifications involves—in addition to studies of the economies, improved service, greater strength and other advantages that may be gained—the consideration of objections that may be encountered and also the requirement of approval by stockholders and public authorities. Consequently, the consummation of merger and unification proposals, even though eventually determined to be desirable and in the public interest, may take considerable time.

A statutory three-judge Federal court, in a unanimous opinion dated September 16, 1958, upheld an order of the ICC approving joint acquisition of the Toledo, Peoria and Western Railroad by the Santa Fe and Pennsylvania. Proceedings in this matter began on July 8, 1955, when the Santa Fe and Pennsylvania filed applications with the commission for authority to acquire control of the TP&W through purchase of its capital stock. In another acquisition case, the commission on November 14, 1958, disapproved the application of the St. Louis-San Francisco Railway to acquire control of the Central of Georgia and ordered it to dispose of all interest in the capital stock of the Central or to transfer such stock to a corporate trustee.

Locomotive inspection. Proceedings continued during the year with respect to ICC Locomotive Inspection Rule 203 which provides that "Each locomotive and tender shall be inspected after each trip, or day's work . . ." The commission's Bureau of Locomotive Inspection had for many years interpreted the "trip or day's work" as referring to the entire trip of the locomotive, but in 1955 changed its interpretation so as to require an inspection at each crew-change point. After informal conferences between representatives of the railroads and the commission failed to develop an acceptable rule, hearings before the ICC were held on March 31 and April 1-3, 1958, following which a brief was filed on behalf of the railroads on July 15, 1958. The examiner's proposed report was issued in October, recommending certain changes in Rule 203 to which the railroads filed objections on November 5, 1958. At year-end the matter was still pending before the commission.

In Ex Parte No. 174, another proceeding also concerned with locomotive inspection, the commission on March 4, 1958, entered its report and order setting forth new rules and instructions for the inspection and testing of locomotives other than steam to supersede those prescribed by the commission's order of December 14, 1925, as amended.

Traffic surveys. The Bureau of the Census in September 1958 issued a report on "Transportation of Fresh Fruits and Vegetables by Agricultural Assemblers," covering the 12 months ended June 30, 1957. The survey indicates, among other things, that railroads transported 48 per cent of the tonnage of these commodities, but that motor carriers handled a larger share than the railroads in each mileage group except for distances of 1,000 or more straight-line miles.

This report was the first to be completed and released in a series of "shipper surveys" underwritten by the Association of American Railroads and initiated last year. Two other surveys in this group, one on transportation of grain through terminal and storage elevators and the other on movements of canned foods from canning plants, are in progress and the results are expected to be published early in 1959.

Freight car per diem. On complaint of the Boston & Maine Railroad and other defendants in ICC Docket No. 31358, the United States District Court for the District of Massachusetts in an opinion dated April 28, 1958, annulled and set aside the ICC order which had held that freight car per diem charges of $1.75, $2.00, and $2.40 were not in excess of reasonable compensation for the periods each was in effect, and remanded the proceeding to the commission for further investigation. Appeals from this decision were filed with the United States Supreme Court.

Boston and Maine Railroad Co., et al., Petitioners, v. United States of America et al., and *Chicago, Burlington and Quincy Railroad Co. et al., Petitioners, v. Boston and Maine Railroad Co., et al.* The Supreme Court in a per curiam opinion handed down November 17, 1958, dismissed without prejudice the appeal of the Boston & Maine and certain other terminating lines which had contended that the determination of a uniform per diem rate to be applied throughout the industry was beyond the commission's adjudicatory jurisdiction but rather lay exclusively within its Section 1 (14) (a) rule-making power. The court's opinion held that the question was prematurely presented for decision pending further investigation by the commission in compliance with the District Court's remand.

This also disposed of the cross appeal by the Chicago, Burlington & Quincy and certain other long-haul roads which had challenged the scope of the District Court's review.

Acting on complaints in Docket Nos. 31774 and 31824, the ICC, in an order dated November 12, 1957, required that the Section 5a Agreement relating to procedures for determining per diem rates and certain other charges be modified to provide that a representative of the American Short Line Railroad Association be a member of the General Committee, Operating-Transportation Division, AAR, for consideration of per diem matters. On January 17, 1958, the railroads filed with the commission a notification of adoption of the terms and conditions of the order. In addition, on March 27, 1958, the carriers filed a petition with the ICC seeking approval of additional amendments to the Section 5a Agreement, one providing that a representative of the American Short Line Railroad Association be a full member of the General Committee for all purposes.

The commission, by order of June 5, 1958, effective July 28, 1958, approved the amendments set forth in the railroad pleadings of January 17 and March 27, 1958.

Transport Competition

In some important respects 1958 was marked as a year of growing recognition that long-standing conditions in

(Continued on page 100)

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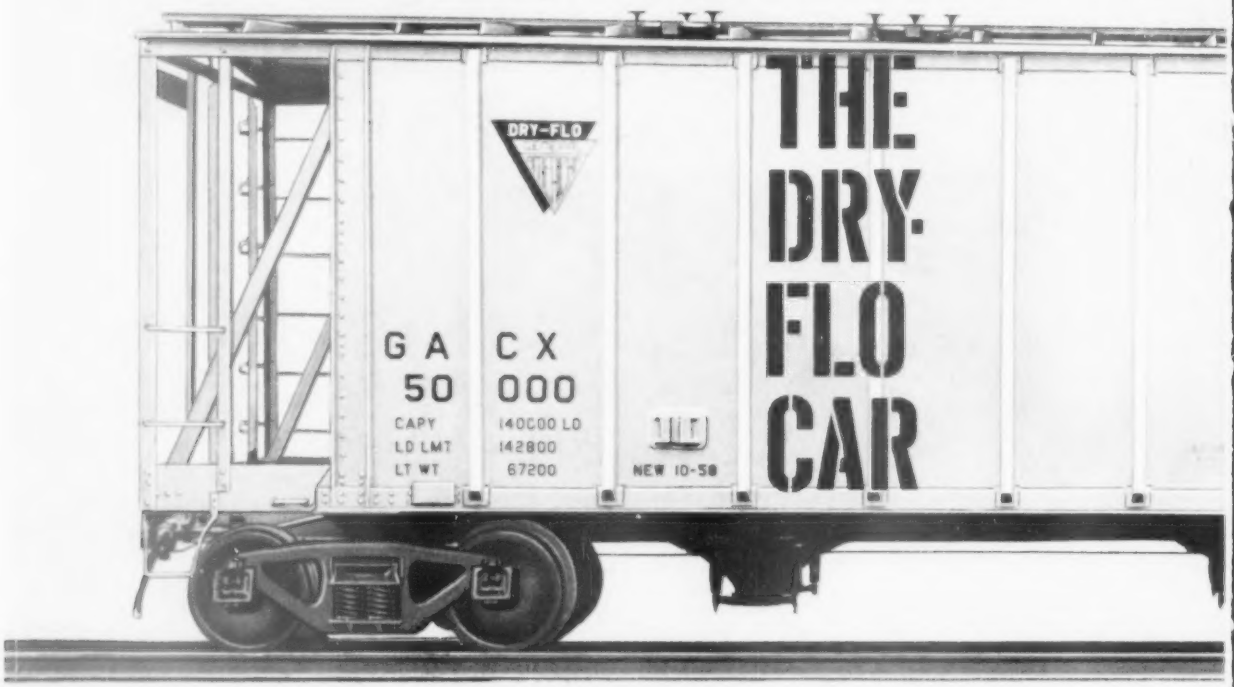

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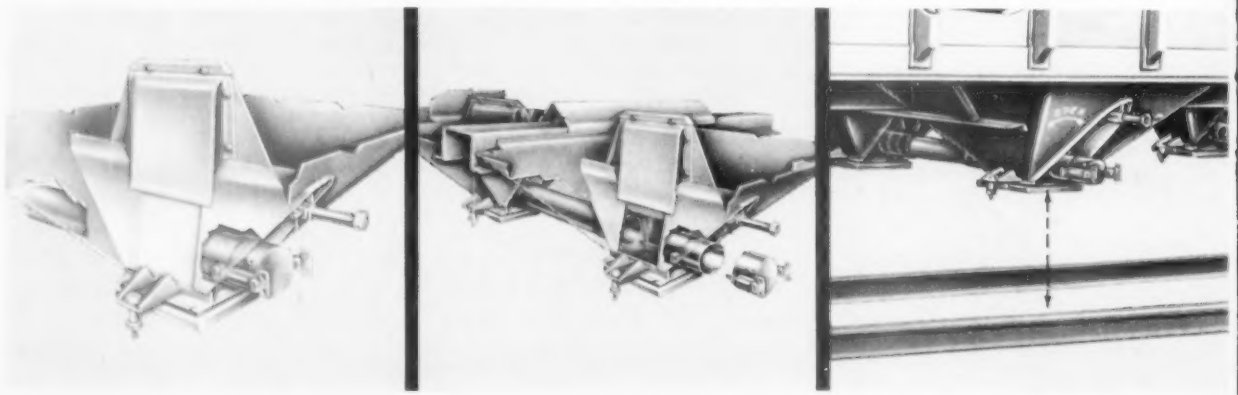

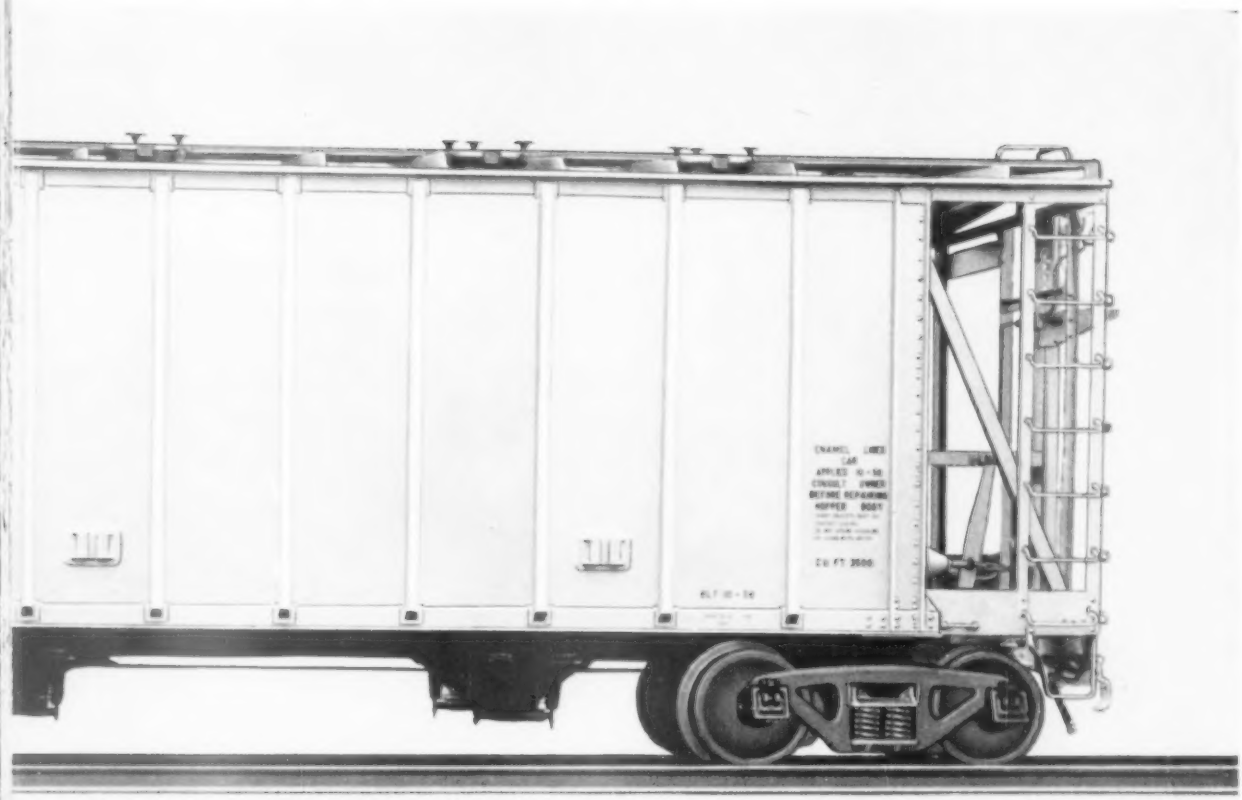

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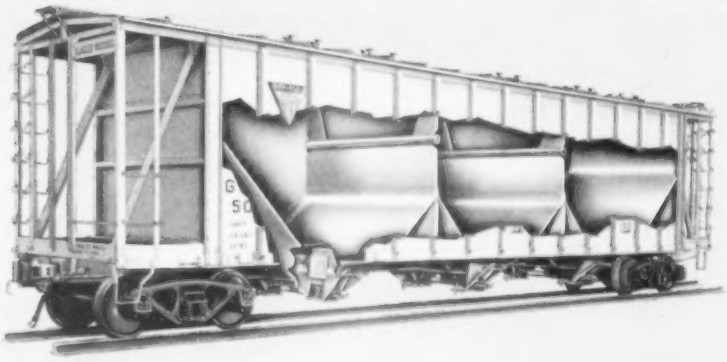

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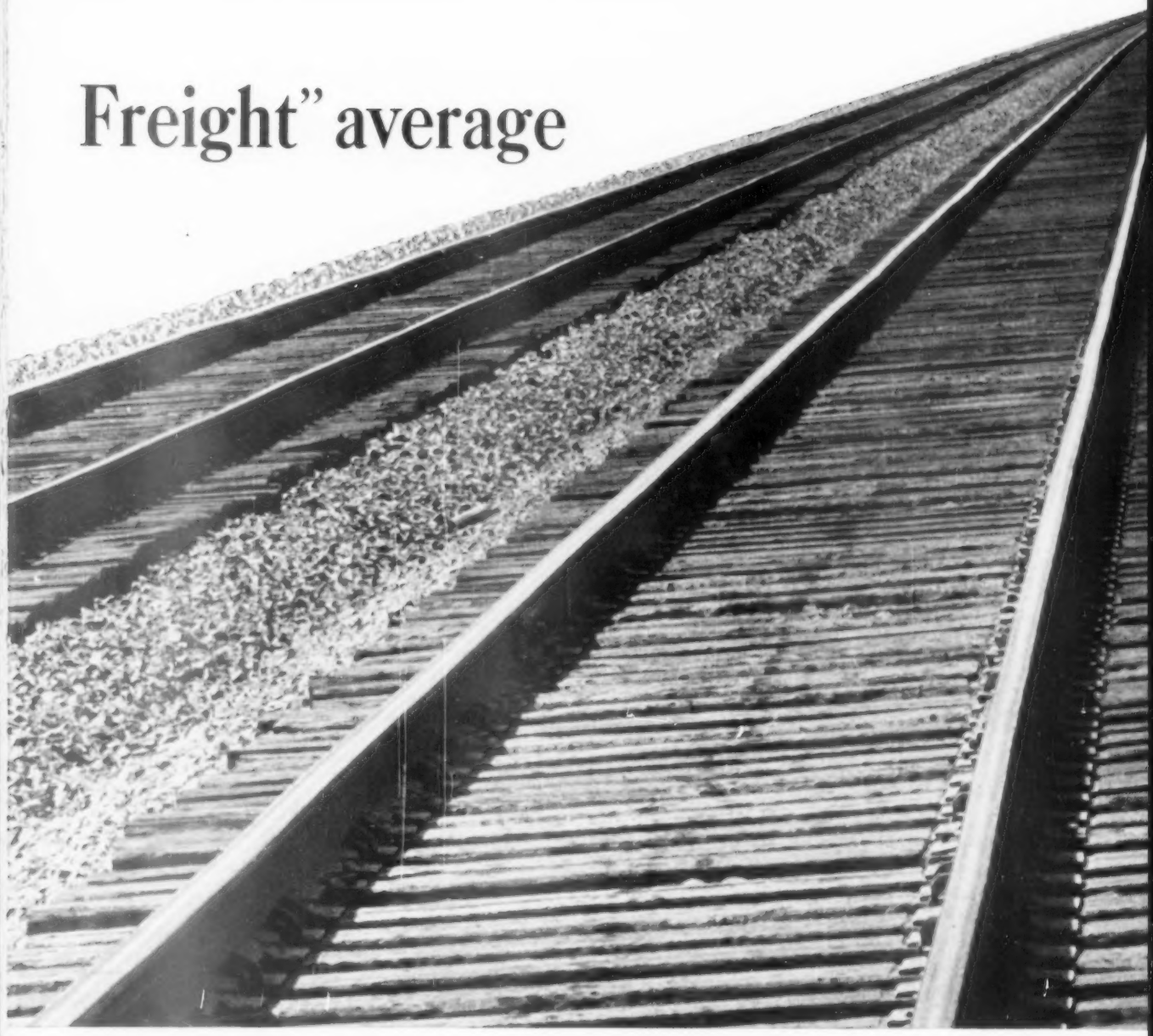

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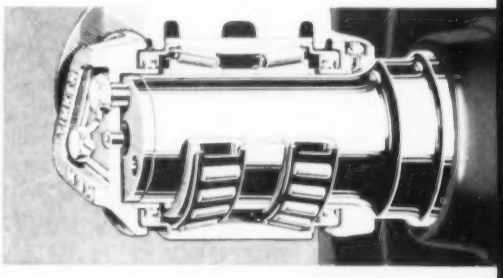

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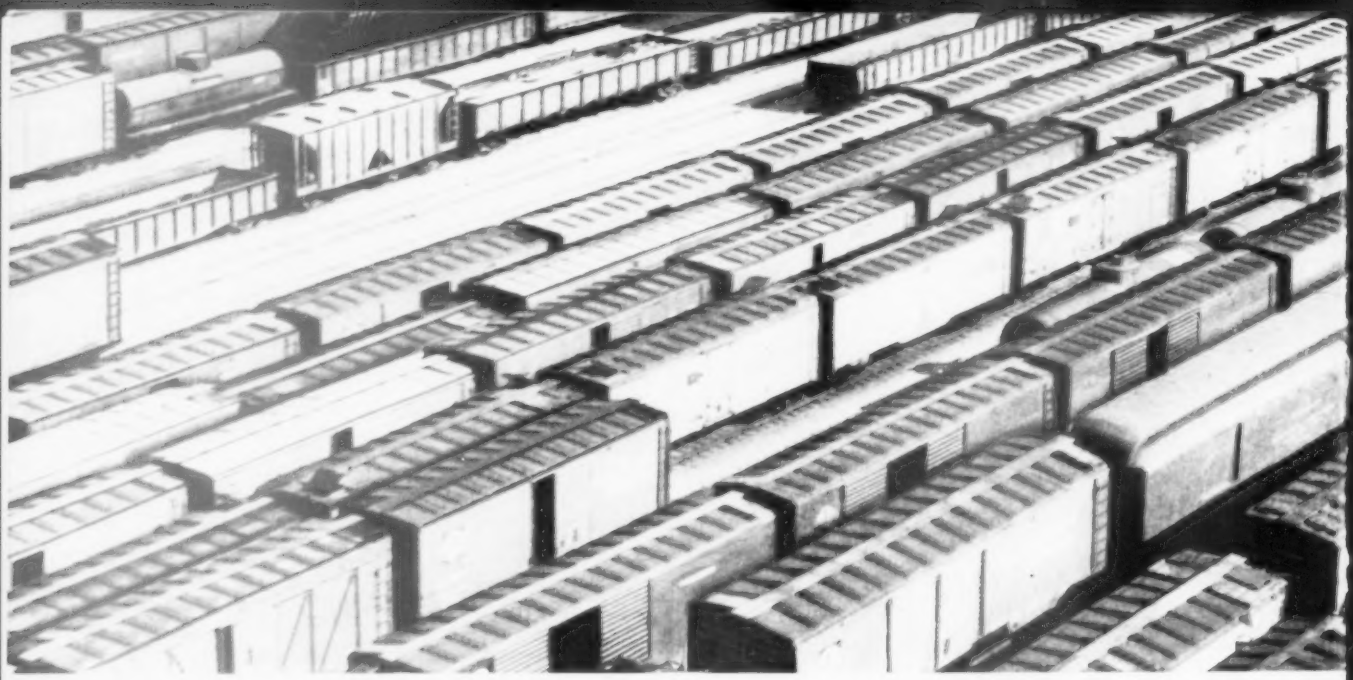

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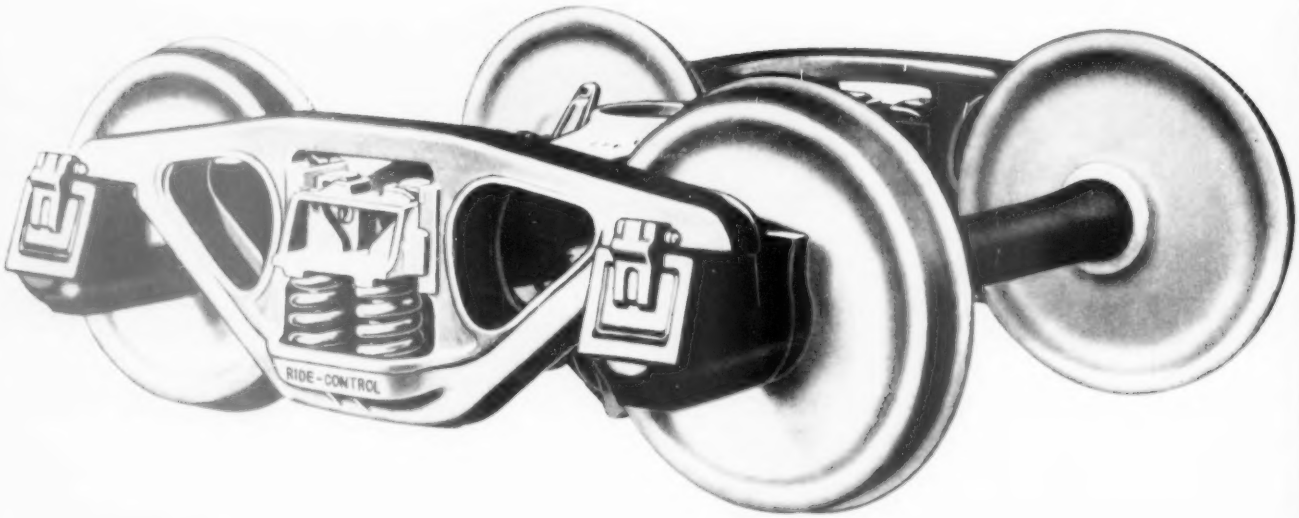

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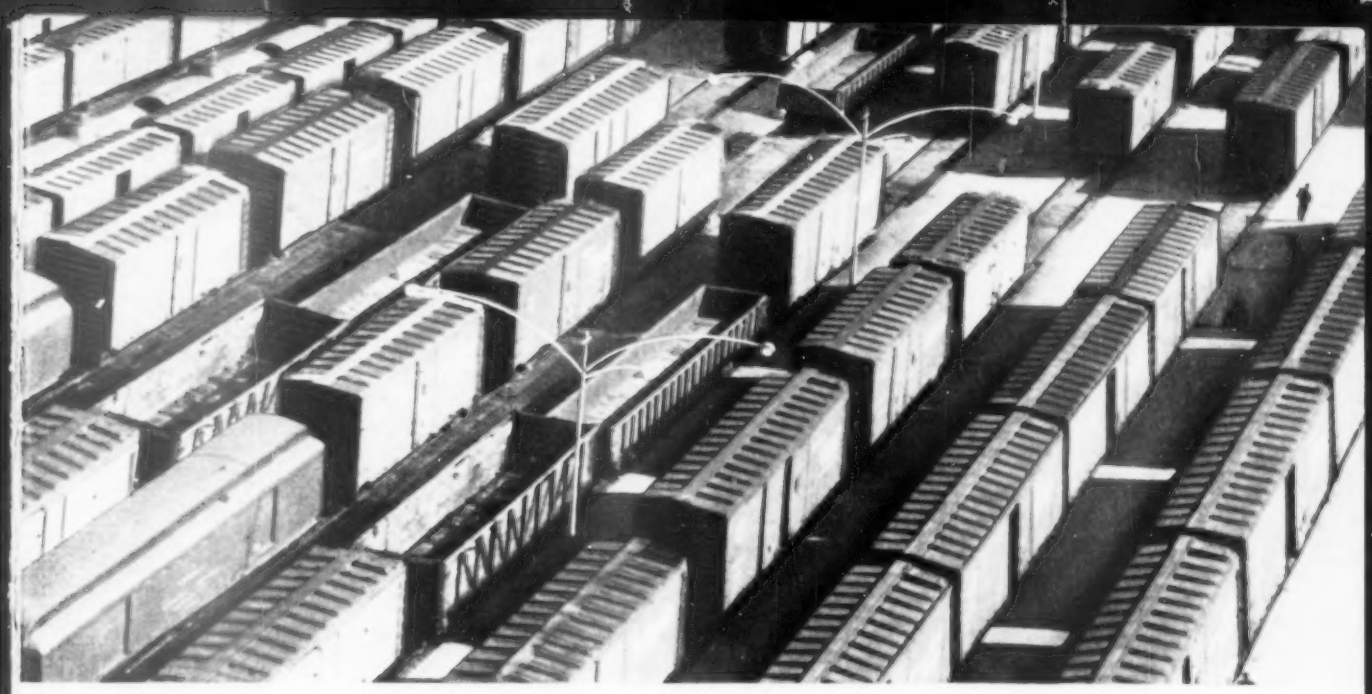

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(Continued from page 90)

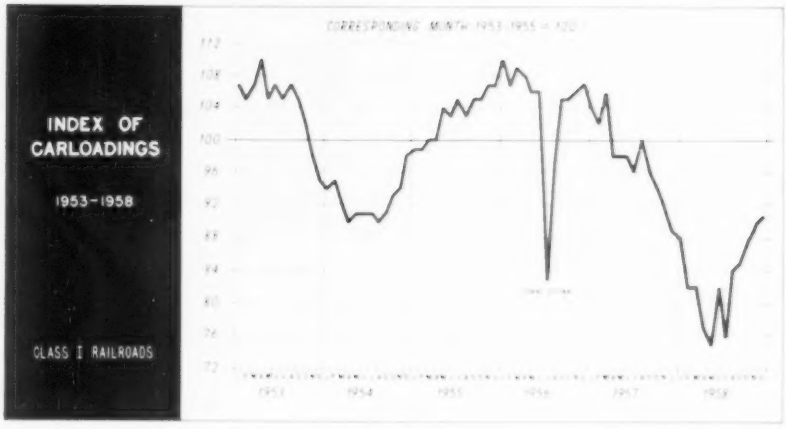
transportation have imposed and continue to impose serious competitive handicaps upon the nation's railroads. Although certain constructive steps of an encouraging nature were taken to improve the competitive position of the railroads, they were of limited scope and served to emphasize the need to cope with deep-seated inequalities that still remain.

Conditions of business recession and lower traffic in 1958 brought into sharper focus the vulnerability of railroads and the competitive handicaps which have persistently sapped their strength. Thus it is indicated that the railroad shares of total intercity freight and passenger traffic again declined in 1958, following the downward trend of previous years in the period since World War II. By 1957 the railroad proportion of intercity freight traffic had dropped to 46.3 per cent, as compared with 48.2 per cent in 1956, 55.6 per cent in 1951, and 66.6 per cent in 1946. In passenger traffic the rail proportion had also reached another low point of 32.2 per cent in 1957, as compared with 35.2 per cent in the preceding year, 45.9 per cent in 1951, and 65.7 per cent in 1946.

On the constructive side, legislation enacted by the second session of the 85th Congress, as noted elsewhere in this review, dealt with some of the regulatory problems affecting competitive transportation by prescribing a new and more realistic rule of competitive rate making for the guidance of the ICC by imposing restraints upon pseudo-private operations of motor vehicles and by stemming the tide toward ever broader interpretations of the "agricultural commodities exemption."

In another helpful action that was long overdue, Congress repealed the excise tax on the for-hire transportation of property. However, the restrictive 10 per cent tax on the transportation for-hire of passengers remains in effect, long after its enactment during World War II as a "temporary" measure to discourage unnecessary travel in that emergency.

In another important area, involving compensatory charges upon those using basic transportation facilities provided from governmental expenditures, progress has continued to be slow. While there were some developments of note in this matter during the year, they lag in fulfillment and action even though the necessity and the equity of such charges is now recognized nearly everywhere "in principle." Among the significant developments during 1958 with respect to transportation user charges, the following items may be noted:



1. "The desirability of a system of user charges" to be paid by those using transportation facilities provided by the government is prominently mentioned in the agenda of subjects to be investigated under S. Res. 303.

2. Owing to greater costs than had been estimated earlier and to increased authorizations to be spread over the next several years under provisions of the Federal-Aid Highway Act of 1958, deficits in the "highway trust fund" for financing the federal-aid highway programs loom ahead. Under these conditions there will be need in the next session of Congress for increases in highway user taxes if the highway-aid program is to go forward as scheduled on a pay-as-you-go basis without deficit financing or a resort to drains on the general budget of government. Meanwhile, in the last session the Congress deferred until January 3, 1961, the date on which the Secretary of Commerce, as directed by Section 210 of the Federal-Aid Highway Act of 1956, is to make a final report to the Congress on the cost responsibility of various classes of highway vehicles to enable the Congress to develop an equitable structure of federal highway user taxes, including proper payments by large and heavy commercial vehicles operated on the public highways for private gain.

3. The St. Lawrence Seaway Development Corporation, pursuant to the requirements of Public Law 358, 83d Congress, held hearings on August 6-7, 1958, on proposed rates and forms of toll charges to be levied by the corporation and the St. Lawrence Seaway Authority of Canada for the use of the seaway. It is expected that the announcement as to tolls will be made early in 1959, prior to the scheduled opening of the new seaway at the beginning of the navigation season.

4. The Department of Commerce on November 27, 1957, pointing out that "re-examination of the long established government policy on use of inland waterway facilities without charges appears warranted in view of the fact that the pattern of modern transportation is materially different from that existing when Congressional policy regarding waterway transportation was first adopted," announced that at the request of the Bureau of the Budget a study was being undertaken to determine whether the government should impose user charges on inland waterways. However, by the end of 1958 no report on the study had been forthcoming, nor had any legislation in this matter been introduced.

5. In his budget message to Congress on January 13, 1958, the President recommended that steps should now be taken to develop adequate user charges for the federal airways and that "we should redouble our efforts to find ways and means to reduce and eliminate all subsidies for airlines." As "first steps toward this end," he proposed that a tax of 3½ cents a gallon be levied on jet fuels and that taxes on aviation gasoline be increased from 2 cents to 3½ cents a gallon with further increases of ¾ cent per year for 4 years in both taxes up to 6½ cents a gallon. The Department of Commerce gave supporting testimony on airway user charges before Congressional committees, but no legislation to put them into effect was introduced in 1958.

6. In a "memorandum of disapproval" of S. 3502, a bill which passed both houses of Congress and would have further expanded and extended the federal program of aid to airport construction, the President on September 2, 1958, explained his action by stating that "civil airports have always been regarded as primarily a local responsibility" and that "the time has

come for the federal government to begin an orderly withdrawal from the airport grant program." He also affirmed that "aviation generally has achieved a state of maturity in which the users should be expected to pay an increasing share of airport costs" and that "with the continued growth of aviation and the application of sound management principles, the progress toward airport self-sufficiency should continue." The President also announced that at the next session of Congress the administration will recommend a "transitional program" to phase out the federal-aid-to-airports program.

As the foregoing chronicle demonstrates, there has been considerable recent activity regarding transportation user charges but little effective result as yet. Obviously, there can be no effective result merely from acceptance of such charges "in principle."

For many years the self-supporting and tax-paying railroads have been forced by public policies ill-suited to present conditions in transportation to compete with other modes which have the basic transportation facilities on which they operate provided for them by the government without being required to make adequate user payments in return—in some cases no payments whatever. The cumulative effects of such policies upon the railroads have through time become progressively more serious, especially in view of the tendencies of government expenditure programs in this field to expand as the supported transport industries grow. As the supported industries have grown larger and stronger the uncompensated spending of public funds on their behalf has continued and in some instances increased.

This curious inversion of sound policy has until now prevailed notwithstanding that no reasonable contention could be made that any of the aided forms of transportation is still in the infant or adolescent category. All are capable of full self-support and should be required to bear that responsibility now and in the future. When this is done we shall have a stronger and more economical transportation system, with a more efficient allocation of economic resources in transportation, and also relief from unnecessary burdens now cast upon general taxpayers which they should not bear.•

Outlook

With the lean and troublesome 1958 behind them, the railroads entered 1959 with a more favorable outlook than prevailed at this time a year ago. General business trends are currently on the upgrade and seem likely to show continued though moderate improvement in the year ahead. Most forecasts of general business levels in 1959 anticipate an overall increase of 5 to possibly 10 percent. The increase in railroad freight traffic may be in this range also, particularly if there is sustained recovery from the recession levels in heavy goods.

In 1958 the railroads initiated a number of self-help programs in addition to those which have been pursued on a continuing basis. Since they are, for the most part, long-range programs involving extensive studies and trial periods, the ultimate results in economy and efficiency are not immediately or completely measurable. However, some of the potential improvements will be realized in 1959, while others may be progressed to the extent that their ultimate worth will be brought into clearer focus. Two of the major problems ahead are the threat of further cost increases and the continuing urgency of more adequate earning levels required to support essential capital improvement programs.

The railroads were greatly heartened in 1958 by favorable public reaction to railroad problems. It has been a long time since public interest in railroad affairs has been so widespread and active. This is an objective which the railroads have long sought, and which must now be sustained in future years, for only with true public understanding can transportation policies in need of correction be shaped in constructive directions.

Current Publications

FROM THE MANUFACTURERS

RAILWAY EXECUTIVE NEWS. A series of single-page bulletins, with illustrations and diagrams. Servo Corporation of America, Railroad Products Division, Dept. RA, New Hyde Park, L.I., N.Y.

These bulletins describe the use of infra-red hot box detectors. Examples of the performance of the Servosafe Detective in various applications are presented with diagrams and illustrations. Volume 1, No. 1 tells how one railroad saved $300 for each "arrest" by the detector, while No. 2 goes on to describe the detection of seven hot boxes within the space of three cars of a passing freight. These bulletins will be published as a continuing series.

BOOKS

100 YEARS OF RAILROAD CARS, compiled and edited by Walter A. Lucas. 196 pages, illustrations, diagrams. Simmons-Boardman Publishing Corp., 30 Church st, New York 7. $8.50

What last year's **100 Years of Steam Locomotives** did for locomotives, this companion volume does for railroad cars. The material included is selected from eight different editions of **Car Builder's Cyclopedia**, as well as from Railway Age files and the author's collection of plans and photographs.

The result is a comprehensive listing of every kind of freight and passenger car design, contemporary as well as antique. Like its predecessor, this book is designed with the quarter million American railway modelers in mind. The elevation drawings are planned to permit model builders to convert them to any particular scale for building models.

Cars illustrated range from the 9-ton Baltimore & Ohio box car of 1856 and the 20-ton B&O triple-pot iron hopper of the same period to the latest freight car designs. The range on the passenger side is equally impressive. Designs are included for an 1856 B&O coach as well as the latest "Pioneer IIIs" built by the Budd Company one hundred years later.

•

RAILROADS OF THE HOUR, by S. Kip Farrington, Jr. 333 pages, illustrated with index. Coward-McCann, Inc., 210 Madison ave, New York 16. $8.50.

In the present volume, the author continues his personal survey of American railroads and railroading that began years ago with **Railroading From the Head End, Railroading From the Rear End, Railroads at War**, and their several successors. Like the earlier works, this contains extensive photographic coverage of the roads being discussed. Also like the earlier works, this is written in an uncritically enthusiastic tone.

•

A PICTURE HISTORY OF U.S. TRANSPORTATION, by Roderick Craib. 124 pages, illustrated, with index. Simmons-Boardman Publishing Corp., 30 Church st, New York 7. $6.00.

This volume takes as its starting point the happy accident that saw the more or less simultaneous development of the steam locomotive and the photographic process. It is primarily a pictorial record of land transportation (including inland waterways and highways as well as railroads) in the 19th Century. The book has been assembled from a variety of sources: private collections, railroad files, library archives, etc. Designed with pictorial as well as historical values in mind, the book uses large pictures, some of them the full width of the 8½ x 11½ page size. There is a complete, cross-referenced index.

The author is associate editor of this magazine.

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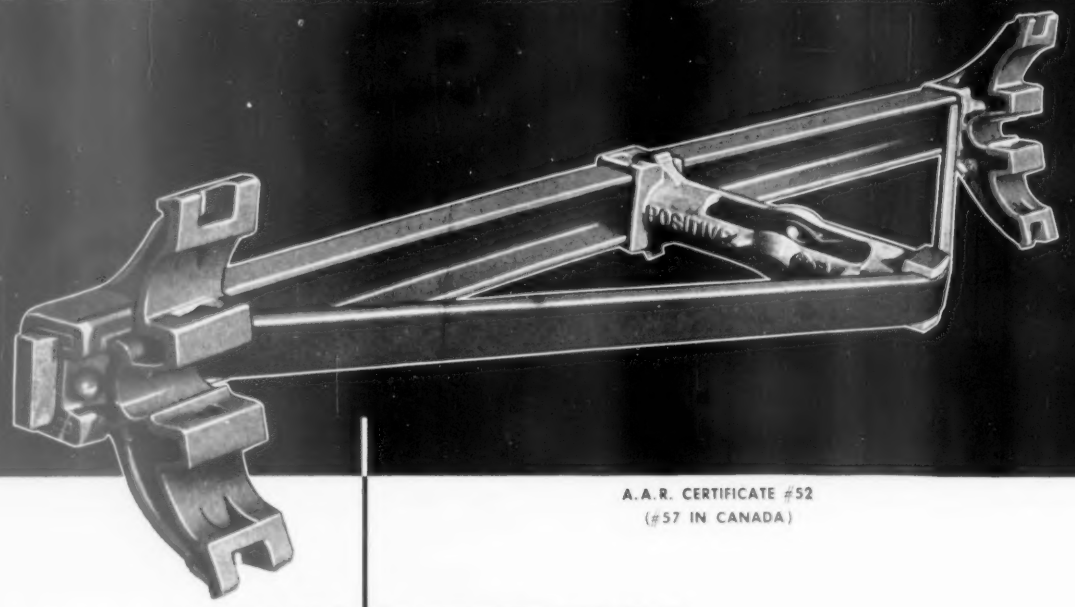

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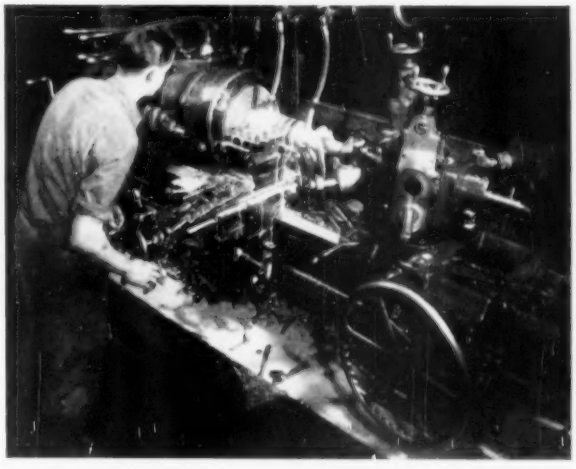

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Statistical Review of 1958

CONTENTS

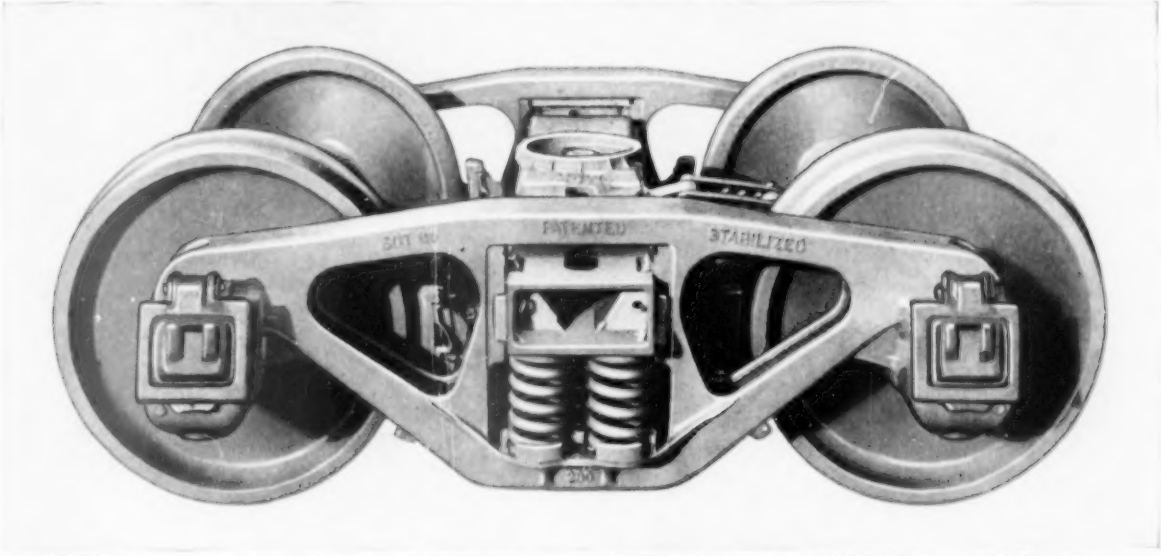
CHANGES IN CASH & CURRENT ASSETS

	Cash & Temporary Cash Investments Sept. 30		Inc. or Dec. %	Total Current Assets		Total Current Liabilities		Excess of Current Assets over Liabilities		Inc. or Dec. %
	1958	1957		End of Sept. 1958	End of Sept. 1957	End of Sept. 1958	End of Sept. 1957	End of Sept. 1958	End of Sept. 1957	
AT&SF	$133,962,068	$100,040,375	+ 33.9	$204,578,239	$179,508,681	$89,729,933	$89,027,022	$114,848,306	$90,481,659	+ 26.9
ACL	16,521,996	18,535,521	− 10.9	44,266,691	50,923,676	13,963,325	22,512,626	30,303,366	28,411,050	+ 6.6
B&O	22,991,564	33,489,837	− 31.4	90,156,668	113,272,947	56,953,041	88,132,862	33,203,627	25,140,085	+ 32.1
B&M	7,425,747	9,486,229	− 21.2	21,045,025	26,425,479	21,109,721	23,320,192	− 64,696	3,105,287	*
CaGa	5,684,179	7,047,659	− 19.4	11,740,541	13,695,824	5,759,475	7,695,293	5,981,066	6,000,531	− .3
CofNJ	7,000,524	6,732,646	+ 4.0	15,948,773	17,343,510	9,908,134	9,805,706	6,040,639	7,536,804	− 19.9
C&O	48,111,809	62,392,213	− 22.0	102,433,761	128,177,943	55,219,991	86,238,745	47,213,770	41,939,198	+ 12.6
C&EI	792,361	1,515,190	− 47.7	6,571,972	7,695,466	6,862,602	7,771,123	− 290,630	− 75,657	*
C&NW (incl. C. St. P. M&O)	15,075,894	3,992,580	+277.6	50,183,834	44,658,220	48,937,818	44,905,927	1,246,016	− 247,707	*
CB&Q	38,210,879	44,723,554	− 14.6	78,278,230	85,423,312	36,671,093	39,960,222	41,607,137	45,463,090	− 8.5
CGW	5,916,490	8,119,212	− 27.1	10,362,698	12,645,554	6,162,012	8,950,461	4,200,686	3,695,093	+ 13.7
CMStP&P	26,149,238	26,614,794	− 1.8	68,579,497	74,902,073	43,533,223	44,483,055	25,046,274	30,419,021	− 17.7
CRI&Pac	30,135,069	19,880,774	+ 51.6	60,851,475	54,207,529	28,990,494	38,789,747	31,860,981	15,417,782	+106.6
CStPM&O included in C&NW										
D&H	12,603,298	10,921,246	+ 15.4	20,868,261	22,626,915	4,862,809	7,743,492	16,005,452	14,883,423	+ 7.5
DL&W	3,083,046	3,042,025	+ 1.3	17,654,649	19,485,953	13,957,646	15,396,244	3,697,003	4,089,709	− 9.6
D&RGW	25,253,322	25,674,404	− 1.6	40,967,433	41,724,592	18,200,723	20,271,791	22,766,710	21,452,801	+ 6.2
DM&IR	1,358,219	10,803,455	− 87.4	10,105,283	19,677,912	12,067,629	17,991,687	− 1,962,346	1,686,225	*
EJ&E	13,023,613	15,628,630	− 16.7	16,248,779	20,360,649	12,641,600	17,017,922	3,787,179	3,342,727	+ 13.3
ERIE	13,907,629	16,434,197	− 15.4	35,718,760	42,052,245	26,928,273	29,734,848	8,790,487	12,317,397	− 27.0
GTW	2,718,942	2,746,940	− 1.0	11,642,047	11,832,940	7,411,228	8,158,121	4,230,819	3,674,819	+ 15.1
GN	51,607,037	49,449,834	+ 4.4	97,841,342	103,911,744	35,000,150	41,753,074	62,841,192	62,158,670	+ 1.1
GM&O	18,379,379	17,601,977	+ 4.4	35,812,282	38,239,300	18,899,507	20,674,771	16,912,775	17,564,529	− 3.7
IC	46,649,359	40,242,466	+ 15.9	84,446,322	86,706,102	37,348,385	47,283,662	47,097,937	39,422,440	+ 19.5
LV	3,992,430	8,310,840	− 52.0	12,593,273	18,591,428	8,499,127	9,725,294	4,094,146	8,866,134	− 53.8
LI	3,722,226	6,468,631	− 42.5	10,016,038	12,751,482	10,054,132	11,635,513	− 38,094	1,115,969	*
L&N (incl. N. C. & St. L.)	31,803,867	44,020,570	− 27.8	78,346,910	97,012,782	27,441,099	38,276,568	50,905,811	58,736,214	− 13.3
MStP&SSM	5,461,409	8,360,318	− 34.7	16,144,692	21,505,064	9,071,447	14,744,764	7,073,245	6,760,300	+ 4.6
M-K-T	9,938,028	7,228,174	+ 37.5	20,544,348	18,960,350	10,650,027	10,850,506	9,894,321	8,109,844	+ 22.0
MP	36,482,704	40,127,476	− 9.1	74,692,126	79,314,734	48,416,509	55,367,074	26,275,617	23,947,660	+ 9.7
NYC	57,718,276	67,667,469	− 14.7	135,748,748	166,325,636	115,035,433	128,246,616	20,713,315	38,079,020	− 45.6
NYC&StL	28,576,993	31,410,829	− 9.0	48,062,429	55,043,830	24,757,483	31,777,252	23,304,946	23,266,578	+ .2
NYNH&H	8,584,382	9,391,957	− 8.6	28,593,001	31,209,104	30,682,808	34,217,049	− 2,089,807	− 3,007,945	*
N&W	37,437,664	35,780,364	+ 4.6	78,774,270	83,902,170	25,752,292	44,445,870	53,021,978	39,456,500	+ 34.4
NP	52,223,013	47,686,840	+ 9.5	97,866,482	95,793,504	39,413,561	42,499,983	58,452,921	53,293,521	+ 9.7
PRR	80,631,899	75,965,894	+ 6.1	203,323,728	206,973,144	129,778,645	135,599,664	73,545,083	71,373,480	+ 3.0
P&LE	9,431,243	14,598,017	− 35.4	15,718,955	23,470,761	8,070,580	11,278,191	7,648,375	12,192,570	− 37.3
Reading	10,929,104	16,358,100	− 33.2	28,102,013	33,967,798	18,432,686	23,006,670	9,669,327	10,961,128	− 11.8
StL-SF	12,638,861	13,597,195	− 7.1	30,240,991	34,078,862	17,300,172	24,059,510	12,940,819	10,019,352	+ 29.8
StLSW	25,290,671	34,469,426	− 26.7	31,529,835	43,006,022	10,422,237	16,025,421	21,107,598	26,980,601	− 21.8
SAL	15,894,690	24,497,492	− 35.1	38,813,975	46,920,957	20,168,709	24,323,461	18,645,266	22,597,496	− 17.5
Southern	52,919,003	39,993,095	+ 32.3	82,853,800	68,773,651	44,255,214	53,902,635	38,598,586	14,871,016	+160.0
SP System	104,187,896	102,564,816	+ 1.6	195,538,721	194,379,705	113,476,808	109,431,015	82,061,913	84,948,690	− 3.4
T&P	10,856,624	11,738,100	− 7.5	22,744,829	25,935,689	7,362,942	9,825,794	15,381,887	16,109,895	− 4.5
UP	100,332,490	122,912,733	− 18.4	182,023,543	209,162,910	98,050,844	127,168,044	183,972,699	81,994,866	+124.4
Wabash	9,536,149	16,825,515	− 43.3	23,568,653	30,361,518	17,290,059	18,828,671	6,278,601	11,532,847	− 44.7

* Current liabilities exceeded current assets in 1958.

(Continued on page 106)

MODERN FREIGHT CARS BEGIN WITH



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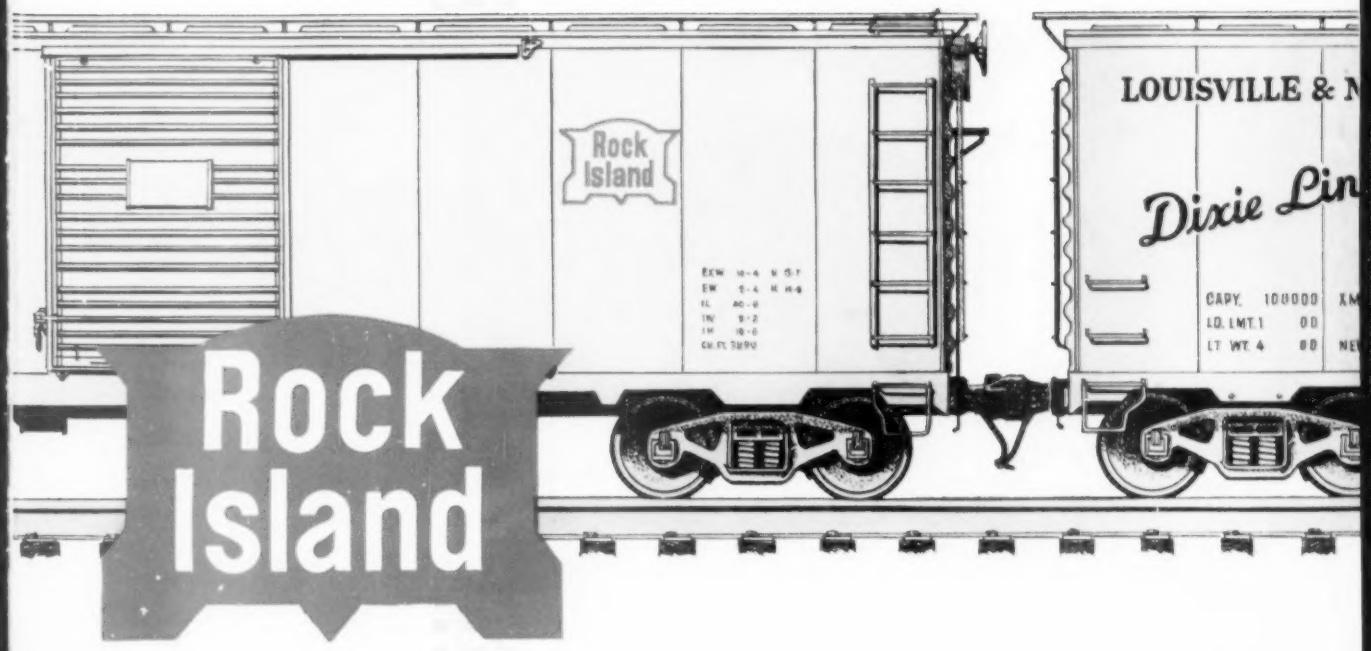
Emporia, Kan.	R	1	1	US&S
Milano, Tex.	R	6		GRS
Cameron, Tex.	R	6		GRS
Sealy, Tex.	R	5		GRS
Monica, Ill.	AR	6		US&S
Topeka, Kan.	AR	5		US&S
ACL				
Ruskin, Fla.	N	2	1	US&S
Emporia, Va.	AN	6		US&S
Samoset, Fla.	AN	4		US&S
Palmetto, Fla.	AN	4		US&S
Tribby, Fla.	AN	6		US&S
B&O				
Patterson Creek, W. Va.	N	19	28	GRS
E. Columbus, Ohio	N	7	5	GRS
Hammond, Ind.	AN	8		GRS
B&M				
E. Somerville, Mass.	R	4	4	US&S
Somerville, Mass.	R	2		US&S
Ayer, Mass.	R	1	1	US&S-GRS
Boston, Mass.	R	1		US&S
Salem, Mass.	N	2	1	GRS
CN				
Brantford, Ont.	R	10	6	US&S
St. Lambert, Que.	R	2	1	GRS
Gravel Sub, Sask.	AR	4		US&S
CP				
Portage-La Prairie, Man.	N	5	3	GRS
Ballantyne, Que.	R	17	15	US&S
Caughnawaga, Que.	R	25	20	US&S
CV				
St. Albans, Vt.	N	4	2	GRS
C&O				
Raceland Jct., Ky.	N	18	16	US&S
Losantville, Ind.	N	5	1	US&S
C&NW				
Cedar Rapids, Iowa	N	7	2	GRS
E. Clinton, Ill.	R		2	GRS
Chicago, Ill.	R	4	2	GRS
Marshalltown, Iowa	AR	8		GRS
Beverly, Iowa	AR	6		GRS
Cedar Rapids, Iowa	AR	4		GRS
C&WI				
BRC, Chicago, Ill.	N	9	13	US&S
CB&Q				
Downers Grove, Ill.	N	12	8	GRS
CMStP&P				
Hastings, Minn.	R	3	1	US&S
Green Island, Iowa	R	5	1	US&S
CRI&P				
Amarillo, Tex.	N	2		US&S
W. Liberty, Iowa	N	15	5	US&S
Carrollton, Tex.	AN	6		US&S
CTA				
Chicago, Ill.	AN	12		GRS
Chicago, Ill.	AN	8		GRS
DL&W				
Stafford, Pa.	N	3	1	US&S
Buffalo, N. Y.	R	11	7	US&S
Millburn, N. J.	R		4	US&S
Plymouth, Pa.	AR	4		US&S
D&RGW				
Tapp, Colo.	R		1	GRS
Gilluly, Utah	R	2		GRS
Kyune, Utah	R		1	GRS
Grand Jct., Colo.	R		2	GRS
DM&IR				
Taconite Jct., Minn.	R	6	2	US&S
Virginia, Minn.	AN	6		US&S
E&E				
Hobart, Ind.	R	3	2	GRS
ERIE				
Hubbard, Ohio	N	4	3	US&S
Coles, Ohio	N	3	1	US&S
De Long, Ind.	AN	5	1	US&S
GN				
St. Paul, Minn.	R	62	36	GRS
GM&O				
Corwith, Ill.	R	4	20	GRS
KCT				
Kansas City, Mo.	R	3	3	US&S
LI				
Jamaica, N. Y.	R	5	4	US&S
L&N				
Anchorage, Ky.	R	5	5	GRS
MTA				
Boston, Mass.	AR		1	US&S
Boston, Mass.	AR		1	US&S
Boston, Mass.	AR		1	US&S
M&StL				
Mason City, Iowa	AN	6		US&S
MKT				
Moran, Kan.	AR	4		
Ft. Scott, Kan.	AR	5		
Vinita, Okla.	AR	6		
Durant, Okla.	AR	8		
Sealy, Tex.	AR	6		
Waxahatchie, Tex.	AR	4		
Ft. Worth, Tex.	AR	6		
MP				
Tioga, La.	AN	2		GRS
NYC				
Syracuse, N. Y.	N	3	1	GRS
Sand Cut, Ohio	N	4		GRS
Gibson, Ind.	R	5	6	GRS
E. Chatham, N. Y.	AN	4		GRS
Mansfield, Ill.	AR	4		GRS
Losantville, Ind.	AR	4		GRS
NYCTA				
New York, N. Y.	R	54	17	US&S
72nd Street	R	24	13	US&S
Concourse	R	1		GRS
Jerome Avenue	R	3	1	US&S
De Kalb Avenue	R	13	4	GRS
Hudson Terminal	R	6	4	GRS
NYC&StL				
Bluffton, Ohio	AR	3		US&S
Hobart, Ind.	AR	4	3	US&S
NYNH&H				
Branford, Conn.	R	6	6	US&S
N&W				
Roanoke, Va.	R	1		US&S
Cincinnati, Ohio	AN	8		US&S
NP				
Durant, Mont.	AN	3		GRS
PRR				
Canton, Ohio	N	7	6	US&S
Baden, Pa.	R	7	6	US&S
Red Bank, Pa.	R	4	1	US&S
Sunbury, Pa.	R	21	11	US&S
Kalamazoo, Mich.	AN	9		US&S
Wasepi, Mich.	AR	8		US&S
Altamont, Ill.	AR	5		US&S
P&LE				
W. Aliquippa, Pa.	R	61	70	US&S
Youngstown, Ohio	R	19	15	US&S
RDG				
Mahanoy Tunnel, Pa.	R	4	2	US&S
StL-SF				
Columbus, Kan.	AR	6	1	US&S
Sikeston, Mo.	AR	4		US&S
Carrollton, Tex.	AR	6		US&S
StLSW				
Fordyce, Ark.	AN	5	1	US&S
SAL				
Town Creek, S. C.	AR	4		US&S
SOU				
Greenville, Fla.	AN	4		
SP				
Texum, Ore.	N	3	1	US&S
UP				
Grand Island, Neb.	N	11	6	US&S
Cheyenne, Wyo.	N	8	4	US&S
Rawlins, Wyo.	N	7	4	US&S
WAB				
Delphi, Ind.	N	4	2	US&S
Cecil, Ohio	AN	4		US&S
Totals		820	420	

CENTRALIZED TRAFFIC CONTROL

Railroad & Location	Miles	Power Switches	Lever Controlled Signals	Automatic Signals	Mfr.
AT&SF					
E. Shopton-W. Shopton, Iowa	2.5 D			4	US&S
Gardner-W. Ottawa, Kan.	25.8 D	11	11	32	US&S
Sealy-Ball, Tex.	11.4 S	1	9	6	US&S
ACL					
Waycross-Folkston, Ga.	34.1 S	8	20	21	US&S
N. Croom-Vitis, Fla.	24.4 S	11	31	25	US&S
B&M					
Willows E.-Westford, Mass.	4.6 S	2	6	2	GRS
Ayer-Willows, Mass.	1.9 D	2	2	2	GRS
N. Beverly-Newburyport, Mass.	14.3 S	2	12	6	GRS
Concord-Westboro, N. H.	68.8 S	8	36	24	GRS
North Adams, Mass.	0.8 S	1	3	1	GRS
CN					
Oakville, Ont.	4.8 D	18	16	4	GRS
Winnipeg, Man.	1.2 D	12	16		GRS
West End, Winnipeg, Man.	8.6 S 6.5 D	32	40	3	GRS
Pacific Jct., Man.		4	4		GRS
St. James Jct., Man.	5.8 S	8	15	4	GRS
CP					
Wilkinson-Trenton, Ont.	50.3 S	10	14	24	GRS
C&O					
Hinton-Sandstone, W. Va.	7.8 D	4	6	12	US&S
Plymouth-Dearborn, Mich.	17.0 D	33	38	12	GRS
CB&Q					
Burlington, Iowa	2.4 D	15	30		US&S
Lavergne-Congress Park, Ill.	4.4 T	12	23	18	GRS
Galesburg, Ill.	0.3 S	4	2		US&S

(Continued on page 109)

ANOTHER!



Rock Island

uses pressure-treated GUM DECKING FOR BOX CARS

to make every decking dollar do more!

Like all railroads, the Rock Island is always interested in cutting costs and increasing the service life of their freight rolling stock. That's why the Rock Island now *uses* Wolmanized® pressure-treated gum decking in new box cars. Furthermore, as older box cars are returned to the shops, Wolmanized protected lumber is used for re-decking.

ADVANTAGES

longer service life
higher impact strength
greater wear resistance

WHY WOLMANIZED GUM DECKING?

The answer, as shown first by tests and then by actual service records, is simple.

1. Wolmanized pressure-treated gum has less mechanical failure.
2. Maintenance due to decay is drastically reduced.
3. Wear resistance of decking is materially greater.
4. Fewer cars are shopped for lumber repair.

And it goes without saying. In-service revenue per-car has climbed!

WRITE for this 12-page booklet. It shows in dollars and cents the advantages of Koppers pressure-treated wood for construction and maintenance of rolling stock. Wood Preserving Division, Koppers Company, Inc., 761 Koppers Building, Pittsburgh 19, Pennsylvania.

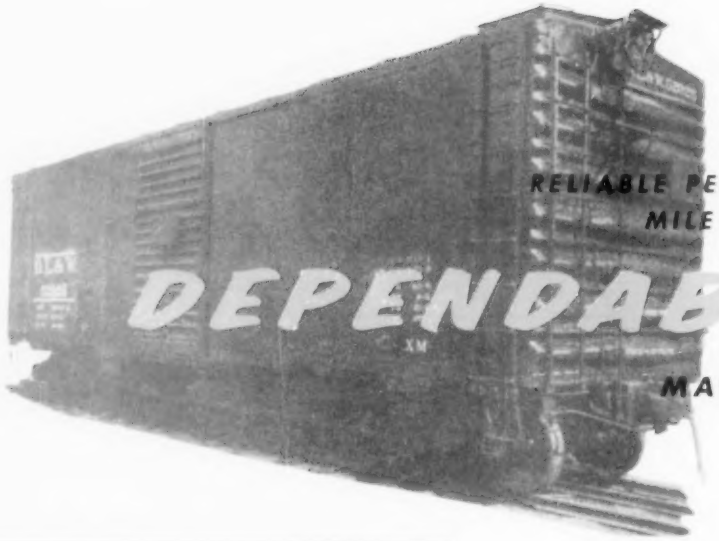
KOPPERS

PRESSURE-TREATED WOOD

CROSS AND SWITCH TIES • PILING • BUILDING POLES • NON-COM* FIRE-PROOFED WOOD
PANEL GRADE CROSSINGS • KRINKLE-LOK* ANTI-CHECKING IRONS

*Koppers Trademark

T-13



RELIABLE PERFORMANCE
MILE AFTER MILE

DEPENDABLE

MAGOR CARS

Built to last — 50 ton flat car.

Top quality Box Car for revenue service.

For heavy duty service — 70 ton gondola car.

Air Dump Car for fast, efficient, low cost maintenance of way operations.

Ample evidence of Magor dependability may be found on railroads across the country. Mile after mile — year after year, the reliable performance and low maintenance of Magor cars keeps them rolling profitably.

Standard, special or custom made — Magor makes them to the most rigid specifications.

The engineering know-how and manufacturing skills of 56 years experience stand behind the Magor promise of dependability!

The Magor Car Corporation welcomes the opportunity of submitting estimates, specifications and recommendations tailored to meet your requirements.

MAGOR
CAR CORPORATION

50 Church Street
New York 7, N.Y.

CENTRALIZED TRAFFIC CONTROL

(Continued from page 106)

Railroad & Location	Miles	Power Switches	Lever Controlled Signals	Automatic Signals	Mfr.
CMStP&P					
Collins-Madrid, Iowa	27.0 S	6	12	8	US&S
D&H	55				
Starrucca-Carbondale, Pa.	15 S 17.0 D	8	20	22	GRS
D&RGW					
Kobe-Avon, Colo.	47 S	13	48	20	GRS
DM&IR					
Aurora-Biwabik, Minn.	6.9 S	5	22	3	US&S
ERIE					
Hubbard-Coles, Ohio	3.4 S	..	..	2	US&S
GN					
Des Lacs-Wheelock, N. D.	85.0 S	25	88	64	GRS
GM&O					
Murphysboro, Ill.	1.5 S	1	4	..	GRS
L&N					
Anchorage-Latonia, Ky.	91.9 S	14	42	56	GRS
MP					
Osawatomie, Kan.	1.3 S	4	4	..	GRS
NYC					
Post Road-Smity Bridge, N. Y.	4.9 S	2	4	2	GRS
Jackson, Mich.-Elkhart, Ind.	97.3 S	13	37	54	GRS
NYNH&H					
Maybrook-Poughkeepsie, N. Y.	23.4 S	6	15	19	GRS
N&W					
Bonsack-Roanoke, Va.	5.8 D				
	2.2 S	40	57		US&S
Sams Siding-E. Norton, Va.	95.2 S	17	68	51	US&S
Hurrican Jct.-Carbo, Va.	4.0 S	2	6	2	US&S
NP					
Martin-Stampede, Wash.	3.0 S	4	9	..	GRS
PRR					
Sunbury-Milton, Pa.	18.7 S	14	27	8	US&S
P&LE					
Placks Run-Wampum, Pa.	12.2 D				
	6.0 S	..	..	24	US&S
QNS&L					
System additions	....	1	2	1	GRS
SP					
Moor-Valley Pass, Nev.	22.2 S	4	22	14	US&S
UP					
Menoken-Silver Lake, Kan.	6.0 S	4	16	2	US&S
Mountain Home, Ida.-Huntington, Ore.	138.8 S	49	170	88	US&S
VGN					
Elmore-Princeton, W. Va.	15.3 S				
	19.0 D	21	63	17	GRS
WAB					
Berkley-Robinson, Mo.	2.5 S	3	10		US&S
Delphi-Longansport, Ind.	19.0 S	4	15	14	US&S
Toledo Yd.-Walbridge Jct., Ohio	1.6 S	..	1	..	US&S
Totals	963.7 S 118.4 D 4.4 T	458	1,116	671	
Road Miles	1,086.5				
Track Miles	1,213.7				

1958 RETARDER INSTALLATIONS

Railroad & Location	Retarders	Power Switches	Class Tracks	Mfr.
C&O				
Toledo, Ohio	2	9	coal dumping	US&S
Clinchfield				
Dante, Va.	14	8	coal dumping	US&S
L&N				
Boyles, Ala.	6	39	40	US&S
Orinoco Mining				
Puerto Ordaz, Venezuela	1	..	ore dumping	US&S
PRR				
Conway, Pa.	1	1		US&S
P&LE				
Youngstown, Ohio	6	91	35	US&S
RF&P				
Alexandria, Va.	3	9	10	US&S
StL-SF				
Tulsa, Okla.	5	40	40	GRS
StLSW				
Pine Bluff, Ark.	5	29	28	US&S
SP				
Los Angeles, Cal.	..	18		GRS
US Steel				
Sarsanburg, Pa.	1	4	ore dumping	US&S
Totals	44	248	153	

YARD RADIO INSTALLATIONS

Railroad	Yards with Radio	Locomotives Equipped	Fixed Stations	Walkie-Talkie Sets
AT&SF	3	4	5	36
ACL	2		2	
B&O	1	7	1	2
B&LE	1			1
CN	3	3	3	8
CP	2	32	8	4
CV	1	3	1	2
C&O	system	28	..	..
	3	6	6	16
CB&Q	1		1	
D&H	4	4*	1	1
	8	16	3	14
DM&IR	system		6	
EJ&E	1	5	1	5
		2*		
ERIE	system	5*		
GN	system	34	2	13
	2		2	
KCS	1	1*	1	3
L&N	1	7	2	5
MKT	system	..	46	
MP	1	6		
NYC	16	31	20	108
P&LE	6	59	8	25
N&W	2	9	2	6
NP	4	13	2	..
	1	13*	1	..
PRR	14	94	17	37
StL-SF	1	4	1	
StLSW	1	10	1	10
SOU	1	7	1	..
	1	1*		
SP	6		3	53
UNION	4	32	4	3
UP	4		2	13
WAB	1		1	2
WM	2			4
Totals	99	436	154	371

* Automobile or Truck.

AUTOMATIC BLOCK SIGNALING

Railroad & Location	Miles	Signals	Mfr.
B&M			
Concord, N.H.	0.3D	1	GRS
N. Beverly, Mass.	1.1D	1	GRS
Newburyport, Mass.	1.2D	1	GRS
Salem, Mass.	0.4D	2	GRS
Boston, Mass.	0.3D	1	US&S
Salem, Mass.	0.3D	1	US&S
Everett, Mass.	0.2D	1	US&S
Lynn, Mass.	0.3D	1	US&S
Mechanicville, N.Y.	wheel checker	1	
CP			
Woodman-Portage La Prairie, Man.	48.0D	34	US&S
English River, Ont.	2.5D	1	US&S
Curle, Sask.	2.0D	1	US&S
C&NW			
Rosemere-Manitowoc, Wis.	6.0S	7	GRS
Oshkosh, Wis.	10.0S	14	GRS
Marcy-Clyman, Wis.	33.0S	30	GRS
C&WI			
BRC, Chicago, Ill.	1.2D	2	US&S
CTA			
Chicago, Ill.	0.2S		
	12.0D	97	GRS
DL&W			
Buffalo, N.Y.	1.9D	4	US&S
New Hartford, N.Y.	1.0S	2	US&S
Plymouth, Pa.	0.7D	1	US&S
EJ&E			
Waukegan-Rondout, Ill.	7.4S	12	GRS
MEC			
New Gloucester-Winthrop, Me.	30.8S	33	GRS
Wiscasset-Winslows Mills, Me.	16.9S	17	GRS
MTA			
Boston, Mass.	1.9D	29	US&S
NYCTA			
New York, N.Y.	0.4S	9	GRS
Broadway-7th Ave.	5.0D	126	US&S
N&W			
Saltville Branch	1.0D	2	US&S
Toms Creek Branch	0.2S	1	US&S
Russell Creek Branch	0.3S	1	US&S
Dump Creek Branch	4.0S	2	US&S
NP			
Vader-Kalama, Wash.	29.0D	40	GRS
SP&S			
Martindale-Levey, Wash.	5.0S	6	GRS
UP			
Portland-Fir, Ore.	5.0S	12	US&S
Totals	121.2S 108.3D	493	
Road Miles	229.5		
Track Miles	337.8		

(Continued on next page)

(Continued from page 109)

YARD COMMUNICATIONS

Railroad	Loudspeaker Systems: Yards	Loudspeaker Systems: Talk-back Speakers	Loudspeaker Systems: Paging Speakers	Intercommunications: Installations	Intercommunications: Telephones	Intercommunications: Loudspeakers
AT&SF	2	71		1	13	22
B&O	1	9	17			
CN	4	185	10	4	137	168
CofG				1		7
C&O	3	77	59	6	18	28
C&EI	1	18				
C&WI						
BRC	1	9				
CB&Q	1	10	4	2		46
CGW	1	19				
CMStP&P	5	56	11	2	6	12
CRI&P				1		6
DL&W	1		6	1		10
D&RGW				2	15	6
EJ&E	2	42	10			
ERIE				2	15	24
GN				5		63
IC	1		6			
IT	1	20	4			
L&NE	1		1			
L&N	1	34	54	4	8	27
MP				1		25
NYC	4	6	19	4	4	128
P&LE	1	115	40			
NP	1	19	2	2		11
PRR	2	12	25			
QNS&L				1	150	25
StL-SF	4	58	55	1		4
StLSW	1	160	24			
SOU	2	298	74	2		33
CNO&TP	1	2	8			
NO&NE	1	4	4			
SP						
T&NO	2	14	9			
SP&S				1		7
UP	5	12		2	84	38
WAB				1		149
WM				1	10	2
WP	1		7			
Totals	53	1,350	449	47	680	841

GRADE CROSSING PROTECTION

Railroads	Number of Crossings Equipped: Flashing Light Signals	Gates and Flashers	Sources of Funds: Railroad	Sources of Funds: Public Funds	Sources of Funds: Joint
AT&SF	46	13	19	6	34
ACL	40	12	12	4	36
B&O	17	6	5	5	13
B&M	9	13	16	5	1
CN	85	17		2	100
CP	50	18		4	64
C&O	13	22	8	6	21
C&NW	60	56	78	3	35
CB&Q	15	11	3	1	22
CMStP&P	24	5	8	2	19
CRI&P	24	3	4	4	19
D&H	5	18	18		5
ERIE	5	8	7	1	5
FEC	3	18	11	10	
GN	12	8	3	5	12
GM&O	4	11	5	3	7
IC	24	4	3	4	21
LI	9	17	11		15
MEC	6	4	7		3
MP	47	5	22	2	28
NYC	66	18	45	7	32
NYC&StL	12	3	3		12
N&W	6	6	4		8
NP	8	5	2	1	10
PE	14		1	11	2
PRR	29	20	21	5	23
StL-SF	27		5	1	21
SAL	21	10	5	2	24
SOO	20	4	3		21
SOU	19	3	9	2	11
SP	82	12	9	26	59
T&NO	18		3	4	11
T&P	11	3	5	1	8
UP	21	3	1	1	22
WAB	8	13	8		13
Totals	961	419	423	147	810

Note: This table lists only those railroads which installed new protection at 10 or more crossings in 1958. Totals include all installations made during 1958.

ROAD TRAIN RADIO

Railroad	Locomotives Equipped	Cabooses, Other Cars	Fixed Stations	Walkie-Talkie Sets
AT&SF	12		5	29
ACL	56	18		94
BAR			1	
B&LE			2	
B&M	58	50	5	72
CofG			2	1**
C&O		10		
C&IM	5	5		9
CB&Q	14			
CGW	1	1		2
CMStP&P	50		5	
CRI&P	61	30	12	
CSS&SB		2**		
C&S				
FW&D				4
DL&W	10	9	3	
D&RGW		20		
DM&IR	33	21	12	18
GN	49	37	7	11
GB&W			1	
KCS		3*	1	
L&A			1	
K&IT		4*		
L&HR	13	8	4	10
L&N	25	21		55
MEC				2
M&StL	14		2	
MKT	30	15	461	
MP		1‡	1	
Monon	7	1		
NP	22	26		5
PGE	5	3	8	
StLSW	48	36	10	2
SAL	22	11	1	11
SOU			5	
SP	219	133	26	
T&NO	55	80	8	50
SP&S	15		3	
T&P		4*		
TP&W		2		
Totals	826	570	125	375

* Automobile or truck.
** M/W dept.
† Also for yard radio.
‡ Boat or tug.

EQUIPMENT ORDERS Reported in 1958

Freight-Train Cars Ordered for Domestic Use—by Type

	Box	Flat	Gondola	Hopper	Cov. Hopper	Tank	Refrig. erator	Caboose	Other	Total
1958	4,844	1,522	1,256	4,476	1,357	1,596	475	105	115	15,746
1957	9,985	846	11,119	10,255	4,648	2,657	2,207	112	195	42,024

Freight-Train Cars Delivered for Domestic Use—by Type

	Box	Flat	Gondola	Hopper	Cov. Hopper	Tank	Refrig. erator	Caboose	Other	Total
1958	8,508	1,145	10,822	10,361	4,599	3,690	1,947	137	372	41,581
1957	33,095	1,074	10,630	31,848	8,601	6,295	4,978	88	2,681	99,290

*Passenger-Train Cars Ordered for Domestic Use—by Type**

	Coach	Coach Comb.	Exp.-Ref.	Sleeping	Dining	Club	Self-Propelled	Baggage Express	MU	Postal & Combination	Other	Total
1958	20	0	0	0	10	0	5	0	0	6	22	63
1957	35	2	0	2	6	1	0	25	6	0	1	78

*Passenger-Train Cars Delivered for Domestic Use—by Type**

	Coach	Coach Comb.	Exp.-Ref.	Sleeping	Dining	Club	Self-Propelled	Baggage Express	MU	Postal & Combination	Other	Total
1958	21	2	14	2	1	1	5	50	6	0	22	124
1957	44	0	521	1	6	0	12	77	0	41	3	705

*All 1958 figures subject to revision.

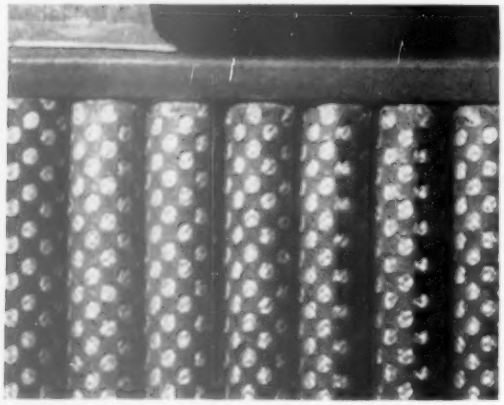
1958 FREIGHT-TRAIN CAR ORDERS

Purchaser	No.	Type	Capacity	Length Ft.	Length In.	Weight	Ordered	Date Delivery	Builder
Alaska	50	Flat	100,000	53	6	56,400	Apr. '58	Dec. '58	Thrall
	50	Flat	100,000	53	6	56,400	Jul. '58	Dec. '58	Thrall
Aliquippa & Southern	12	Gondola	140,000	30	8	51,300	Feb. '58	Mar. '59	Company Shops
	10	Gondola	200,000	34	0	76,500	Jun. '58	Feb. '59	Company Shops
	10	Gondola	200,000	34	0	76,500	Nov. '58	Apr. '59	Company Shops
	5	Hopper	140,000	57	0	75,040	Feb. '58	Oct. '58	Company Shops
American Refrig. Transit	200	Refrigerator	80,000	41	1	62,000	Jan. '58	Aug. & Sept. '58	Pacific Car
	100	Refrigerator	80,000	41	1	62,000	Feb. '58	Aug. & Sept. '58	Pacific Car
Atchison, Topeka & Santa Fe	1	Flat	300,000				Feb. '58	Nov. '58	Company Shops
	25	Flat	140,000	53	6		Jan. '58	Nov. '58	Company Shops
	100	BX	140,000	50	6		Mar. '58	Oct. '58	Company Shops
	200	Box	140,000	50	6		Nov. '58	Aug. '59	Company Shops
	300	Box	140,000	50	6		Nov. '58	May '59	Company Shops
	50	Hopper					Oct. '58	Dec. '58	Company Shops
	50	Cov. Hopper	140,000	41	1	60,000	Oct. '58	Nov. & Dec. '58	ACF
Atlantic Coast Line	200	Wood Chip	140,000	50	9	68,000	Nov. '58	1959	Company Shops
Baltimore & Ohio	1,000	Gondola	140,000	52	6	60,100	Aug. '58	'58-'59	Company Shops
	500	Hopper	100,000	33	0	41,600	Dec. '58	1959	Company Shops
	12	Caboose	80,000	23	4	54,000	Apr. '58	1959	Company Shops
Canadian National	60	Air Dump	100,000	31	2	54,700	Jun. '58	Nov. '58	National Steel Car
	435	Hopper	140,000	40	8	52,900		Apr. '59	Eastern Car
	50	Transporter	8-unit	74	6	82,800	Sept. '58	1st qtr. '59	Canadian Car
	75	Transporter	6-unit	56	6	68,000	Sept. '58	1st qtr. '59	Canadian Car
	1	Flat	100,000	52	6	47,900	Oct. '58	Nov. '58	Marine Industries
	32	Hopper	80,000	36	0	39,300	Sept. '58	Feb. '59	Canadian Car
Canadian Pacific	300	Flat	100,000	46	0	41,400	May '58	Sept. '58	National Steel Car
Chesapeake & Ohio	50	Box	100,000	50	6	56,000	Nov. '58	Dec. '58	Pullman-Standard
	50	Flat	140,000	85	0	71,000	Oct. '58	Feb. '59	ACF
Chicago & Eastern Illinois	750	Hopper	140,000	40	8	52,000	Nov. '58	Jan. & Mar. '59	ACF
Chicago & North Western	1,000	Box	100,000	40	6	45,900		4th qtr. '59	Pullman-Standard
	50	Cov. Hopper	140,000	41	1	63,250		Jan. '59	ACF
	50	Box	100,000	40	6			Feb. '59	Pacific Car
	50	Box	100,000	50	6			Feb. '59	Pacific Car
Chicago, Burlington & Quincy	1	Flat	300,000	72	3	170,000	Jan. '58	June '58	Company Shops
	100	Cov. Hopper	140,000	41	0	63,200	June '58	Aug. '58	Pullman-Standard
	50	Cov. Hopper	140,000	29	6	55,000	June '58	Dec. '58	General American
	100	DF Box	100,000	40	6	53,000	June '58	Jan. '59	Company Shops
	50	Flat	100,000	53	6	63,000	Dec. '58	Jul. '59	Company Shops
	100	DF Box	140,000	50	6	78,000	Dec. '58	Aug. '59	Company Shops
	100	Gondola	140,000	52	6	76,000	Dec. '58	Jul. '59	Company Shops
	500	Hopper	140,000	40	8	48,000	Dec. '58	Dec. '59	Company Shops
	20	Cov. Hopper	140,000	29	6	55,000	Dec. '58	2nd qtr. '59	General American
	100	Cov. Hopper	140,000	40	9	65,000	Dec. '58	Apr. '59	General American
	30	Caboose	80,000	30	0	50,000	Dec. '58	Dec. '59	Company Shops
	600	Box	100,000	40	6	49,000	Dec. '58	Oct. '59	Company Shops
Chicago Great Western	5	Box	100,000	40	6	62,000	May '58		Thrall
Chic., Milwaukee, St. Paul & Pacific	500	Box	100,000	40	6	55,400	May '58	Aug. '58	Pullman-Standard
	26	Flat	120,000	80	1	61,500	Sept. '58	Jan. '59	Fruehauf
	300	Box	100,000	40	6	55,400	Dec. '58	Feb. '59	Pullman-Standard
	100	Box	100,000	50	1	58,750	Dec. '58	Mar. '59	Pullman-Standard
Chicago, Rock Island & Pacific	100	Box	100,000	50	6	54,000	Nov. '58	Dec. '58	Pullman-Standard
	400	Box	100,000	40	6	47,300	Dec. '58	Mar. '59	ACF
	100	DF-Box	100,000	40	6	47,300	Dec. '58	Mar. '59	ACF
	100	DF-Box	100,000	50	1	68,000	Dec. '58	Mar. '59	General American
	30	Caboose	60,000	28	6	49,100	Jan. '58	May '58	Morrison Railway Supply
Clinchfield	100	Hopper	140,000	40	8	51,600	Dec. '58	Mar. '59	ACF
Delaware & Hudson	10	Caboose	80,000	30	1/4		Nov. '58	2nd qtr. '59	Morrison Railway Supply
Duluth, South Shore & Atlantic	1	Box	100,000	40	6	47,200	Oct. '58	Dec. '58	Pullman-Standard
Florida East Coast	20	Flat	140,000	85	0		Oct. '58	Feb. '59	Pullman-Standard
	5	Flat	100,000	54	6	52,500	Mar. '58		Thrall
Fruit Growers Express	200	Refrigerator	140,000	50	0		Dec. '58	1959	Company Shops
	100	Refrigerator	100,000	40	0		Dec. '58	1959	Company Shops
Illinois Central	25	Cov. Hopper		42	6	57,100	Nov. '58		General American
	25	Cov. Hopper		42	6	57,100	Dec. '58	Mar. '59	General American
	200	Box	100,000	50	6	56,000	Nov. '58	Feb. '59	Company Shops
Kansas City Southern	10	Cov. Hopper	140,000						General American
Lehigh Valley	75	Flat	110,000	40	1	45,000	Nov. '58	Feb. '59	Company Shops
	50	Flat	140,000	52	1	50,000	Nov. '58	May '59	Company Shops
	10	Cov. Hopper	140,000	29	6	56,700	Feb. '58	Feb. '58	General American
Louisville & Nashville	3,000	Hopper	140,000	42	10	52,500	Dec. '58	Begin Jan. '59	Pullman-Standard
Minneapolis & St. Louis	20	Cov. Hopper		47	0	65,000	Oct. '58	Nov. '58	Pullman-Standard
	2	Box	100,000	50	6	54,000	Jan. '58	May '58	Pullman-Standard
Minneapolis, St. Paul & Sault Ste. Marie	5	Cov. Hopper	140,000	29	3	51,000			Pullman-Standard
	5	Cov. Hopper	140,000	29	3	51,000			ACF
Missouri-Kansas-Texas	15	Cov. Hopper	140,000	41	1		Jan. '58	Mar. '58	Pullman-Standard
	20	Hopper	140,000	29	6		June '58	Dec. '58	General American
	10	Box	100,000	40	6		Nov. '58	Dec. '58	Pullman-Standard
	25	Flat	140,000	53	6		Dec. '58	Jan. '59	Thrall
	20	Tank							ACF
National Railways of Mexico	135	Gondola	140,000			61,400	Jul. '58	Sept. '58	Pullman-Standard
	200	Flat	140,000	53	6	60,000	Jul. '58	Oct. & Nov. '58	ACF

(Continued on page 114)

The new Exide-Ironclad diesel locomotive battery

MORE POWER, LONGER LIFE—THIS BATTERY BELONGS IN YOUR ECONOMY PROGRAM



50 YEARS AGO, Exide patented the now-famous Exide-Ironclad tubular positive plate battery. For power and economy, nothing has ever matched it. Yet Exide engineers have constantly improved it. Today's battery (positive plate shown above) packs more power per plate . . . gives you a 50% increase in amperes discharged at diesel cranking rates even over previous model Exide-Ironclad Batteries.

How many things can you buy today that give better performance than their predecessors, yet cost less to own and use? Well, the new Exide-Ironclad diesel locomotive battery is one. You get actually more starting power from the same capacity. And you save money three ways:

1. **More power per dollar when you buy it.** Because the new Exide-Ironclad makes a more efficient use of battery materials, you get more power in the same space. Cost savings are passed on to you.
2. **Longer life.** The new armored porous tubular construction of the positive plates virtually eliminates loss of active material. So the battery lasts longer—further reducing the cost of your battery power. Superior porosity actually improves battery performance.
3. **Greater versatility.** Because it packs its power in a smaller size, your new Exide-Ironclad Battery provides ample power for large locomotives—yet fits smaller ones. So every battery you have is more useful.

Beyond question, here is today's outstanding value in a diesel locomotive battery. New, portable chargers for every application. **Write for the new, illustrated bulletin. Exide Industrial Division, The Electric Storage Battery Company, Philadelphia 20, Pa.**

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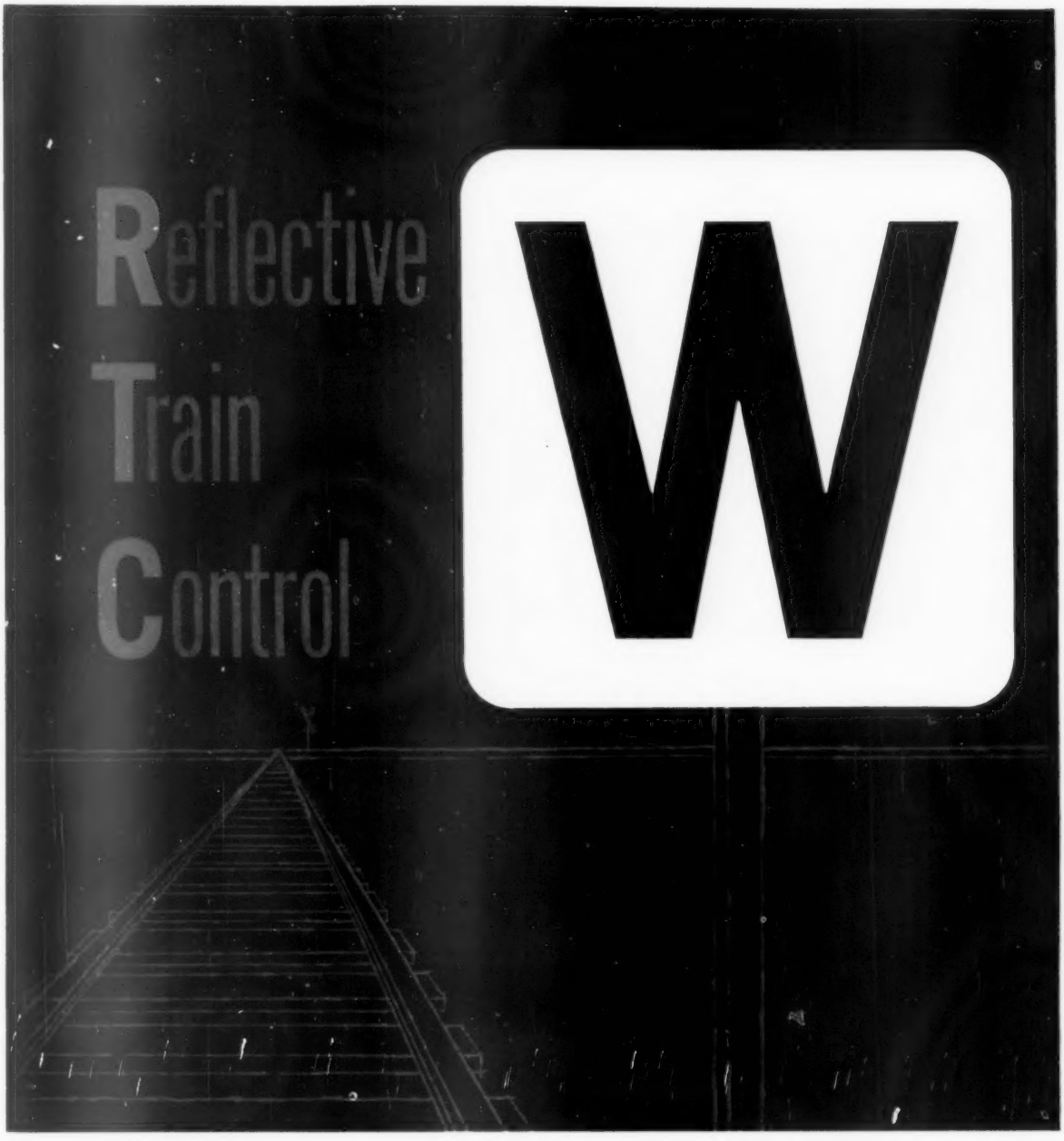

60 roads now use this low-cost signing system

With modern Reflective Train Control you get nighttime safety . . . headlamps light up wayside signs bold and bright, clearly in any weather. RTC lowers signing costs because you eliminate the cost of sign painting and field maintenance. Of the 60 roads now using RTC more than 25 save additional dollars by mass producing signs of rugged "Scotchlite" Sheeting for their entire systems in central shops. Why don't *you* find out how much money RTC can save *your* road? See your 3M Representative or write: 3M Company, Dept. FQ-1199, St. Paul 6, Minnesota.

WIDE ANGLE FLAT-TOP

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REFLECTIVE SHEETING

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MINNESOTA MINING AND MANUFACTURING COMPANY

. . . WHERE RESEARCH IS THE KEY TO TOMORROW

3M COMPANY

ST. PAUL 6, MINN.

FREIGHT-TRAIN CAR ORDERS

(Continued from page 111)

Purchaser	No.	Type	Capacity	Length Ft.	Length In.	Weight	Ordered	Date Delivery	Builder
New Orleans Public Belt	10	Cov. Hopper	140,000				Dec. '58	Jan. '59	Thrall
New York Central	100	Flat	120,000	80	1	61,500	Nov. '58	1st qtr. '59	Fruehauf
New York, Chicago & St. Louis	15	Hopper ①	100,000	29	6	55,500	Oct. '58	Nov. '58	General American
Norfolk & Western	25	Box	100,000	50	6	54,100	May '58	Aug. '58	Pullman-Standard
	25	Box	100,000	50	6	53,200	Oct. '58	Nov. '58	Pullman-Standard
	50	Cov. Hopper	140,000	29	3	49,200	Feb. '58	Apr. '58	ACF
North American Car	35	Cov. Hopper ①	140,000	41	3/4	62,000	June '58	Jul. '58	Pullman-Standard
	25	Cov. Hopper ①	140,000	41	3/4	62,000	Jul. '58	Aug. '58	Pullman-Standard
	7	Cov. Hopper ①	140,000	41	3/4	62,000	Jul. '58	Aug. '58	Pullman-Standard
	12	Flat ①	140,000	85	0	65,000	Oct. '58	Jan. '59	Pullman-Standard
Northern Pacific	25	Refrigerator	100,000	34	2 7/8	65,500	Mar. '58	Oct. '58	Pacific Car
	20	Hopper	100,000	31	10 1/2	57,500	Dec. '58	Dec. '58	Magor
	100	Refrigerator	100,000	40	6	62,700	Dec. '58		Company Shops
	400	Box	100,000	40	6	53,700	Dec. '58		Company Shops
Pacific Great Eastern	10	Refrigerator	113,000	40	0	56,000	Mar. '58	Jul. '58	National Steel Car
Pennsylvania	20	Flat	90,000	55	1	74,570	Feb. '58	Oct. '58	Company Shops
	6	Flat	280,000	58	4	126,200	Feb. '58	Nov. '58	Company Shops
	2	Flat	400,000	72	6	182,900	Feb. '58	Sept. '58	Company Shops
Peoria & Eastern	40	Box ①	110,000	50	9		Oct. '58	1959	Company Shops
	40	Box ①	110,000	50	0		Oct. '58	1959	Company Shops
Pittsburgh & Lake Erie	25	Flat	120,000	80	1	61,500	Nov. '58	Jan. '59	Fruehauf
Sacramento Northern	10	Hopper		41	0	63,600	Sept. '58	Nov. '58	ACF
St. Louis-San Francisco	100	Cov. Hopper	140,000	29	3	50,700	Dec. '58	Jan. '59	Pullman-Standard
Southern Pacific	100	Flat		85	0		Oct. '58	Feb. '59	General American
St. Louis Southwestern	25	Box	100,000	40	6		Jul. '58	Jan. '59	Pacific Car
	25	Caboose	80,000	30	0	55,000	Oct. '58	Jan. '59	Morrison Railway Supply
	15	Flat ①	140,000	85	0	78,000	Oct. '58	Feb. '59	ACF
Terminal Railroad Assn. of St. Louis	10	Caboose		21	10	60,000	Dec. '58	Mar. '59	Morrison Railway Supply
Tidewater Southern	10	Refrigerator	100,000	50	0	71,500	Sept. '58	Dec. '58	Pacific Car
	40	Refrigerator	100,000	50	0	71,500	Sept. '58	Dec. '58	Pacific Car
Trailer Train Co.	200	Flat	140,000	85	0	73,000	Aug. '58	Dec. '58	Pullman-Standard
	200	Flat	140,000	85	0	78,000	Aug. '58	Dec. '58	ACF
	200	Flat	140,000	85	0	73,000	Oct. '58	Jan. '59	Pullman-Standard
	200	Flat	140,000	85	0	78,000	Sept. '58	Jan. '59	ACF
Union Pacific	200	Box	100,000	50	6		Jan. '58	Apr. '58	Pullman-Standard
	200	Gondola	140,000	46	0		Jan. '58	Mar. '58	ACF
	200	Gondola	140,000	52	6		Jan. '58	Feb. '58	Bethlehem Steel
	52	Cov. Hopper	140,000				Jan. '58	Mar. '58	Pullman-Standard
	48	Cov. Hopper	140,000				Jan. '58	Feb. '58	Pullman-Standard
	100	Caboose					Aug. '58	Dec. '58	Company Shops
	100	Flat	140,000	85	0		Sept. & Dec. '58	Feb. '59	ACF
	100	Flat	140,000	85	0		Sept. & Dec. '58	Jan. '59	Pullman-Standard
Union Tank Car	12	ICC-111A ①	140,000			58,950	June '58	1958-1959	Company Shops
	6	ICC-111A ①	100,000			58,000	June '58	1958	Company Shops
	2	ICC-111A ①	100,000			65,500	June '58	1959	Company Shops
	25	ICC-105 ①	100,000			49,700	Sept. '58	1959	Company Shops
	75	ICC-105 ①	100,000			49,700	Sept. '58	1958-1959	Company Shops
	4	ICC-111A ①	200,000			88,500	Oct. '58	1959	Company Shops
U. S. Government	20	Helium	100,000	41	0	234,000	Dec. '58	Sept. '59	ACF
Virginian	4	Bulkhead	100,000	48	6	59,000	Oct. '58	Jan. '59	Company Shops
Western Maryland	1	Hopper ①	140,000	40	2	56,500		Sept. '58	General American
Western Pacific	4	Hopper ①	140,000				Apr. '58	Oct. '58	General American
	50	Box	100,000	50	0		Sept. '58	Dec. '58	Pacific Car

*All freight cars are steel construction unless otherwise noted.
① Steel frame.
② Alloy Steel.
③ Welded.

1958 LOCOMOTIVE ORDERS

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Date Ordered	Delivery Date	Builder
Angelina & Neches River	1	M-107B	Rd.-Sw.	230,000	1,000	May '58	Oct. '58	Alco
Atchison, Topeka & Santa Fe	12		Freight	380,000	2,400	Dec. '58	Mar.-May '59	Alco
	30		Freight	380,000	2,400	Dec. '58	May & June '59	E. M. D.
Atlanta & St. Andrews Bay	1	C-C	SD-9	360,000	1,750		Apr. '58	E. M. D.
Bath & Hammondsport	1	4-Wheel	Sw.	50,000	200	Nov. '58	Feb. '59	Plymouth
Canadian National	45	B-B	Rd.-Sw.	248,000	1,800	Jan. '58	Last half '58	Mt'l. Loco. Works
	7	B-B	Pass.	260,000	1,800	Jan. '58	4th qtr. '58	Mt'l. Loco. Works
	7	B-B	Pass.	260,000	1,800	Jan. '58	4th qtr. '58	Mt'l. Loco. Works
	11	B-B	Sw.	232,000	1,000	Jan. '58	May-Aug. '58	Mt'l. Loco. Works
	5	A1A-A1A	Rd.-Sw.	240,000	1,200	Jan. '58	Dec. '58	Gen. Motors Diesel
	9	B-B	Rd.-Sw.	224,000	1,200	Jan. '58	Jul. '58	Gen. Motors Diesel
	24	B-B	Rd.-Sw.	224,000	1,200	Jan. '58	Sept.-Dec. '58	Gen. Motors Diesel
	17	B-B	Rd.-Sw.	248,000	1,200	Jan. '58	Nov. & Dec. '58	Gen. Motors Diesel
	26	B-B	Rd.-Sw.	230,000	1,750	Jan. '58	Apr. & May '58	Gen. Motors Diesel
	16	B-B	Rd.-Sw.	240,000	1,200	Jul. '58	Jan. & Feb. '59	Gen. Motors Diesel
	4	A1A-A1A	Rd.-Sw.	240,000	1,400	Jul. '58	Jan. & Feb. '59	Mt'l. Loco. Works
	69	B-B	Rd.-Sw.	230,000	1,750	Jul. '58	Jan.-June '59	Gen. Motors Diesel
	27	B-B	Pass.	260,000	1,800	Jul. '58	Jan.-Mar. '59	Mt'l. Loco. Works
	5	B-B	Pass.	260,000	1,800	Jul. '58	Jan.-Mar. '59	Mt'l. Loco. Works
	23	B-B	Sw.	234,000	1,000	Jul. '58	Jan.-June '59	Mt'l. Loco. Works
	5	B-B	Rd.-Sw.	248,000	1,750	Sept. '58	Nov. & Dec. '58	E. M. D.
	7	B-B	Sw.	234,000	900	Sept. '58	Nov. & Dec. '58	E. M. D.
	4	B-B	Rd.-Sw.	252,300	1,750	Sept. '58	Nov. & Dec. '58	E. M. D.
Canadian Pacific	12	B-B	Sw.	199,000	660	Nov. '58	June '59	Mt'l. Loco. Works
	19	B-B	Rd.-Sw.	230,000	1,000	Nov. '58	Aug. '59	Mt'l. Loco. Works
Chicago & North Western	13	B-B	Rd.-Sw.	254,000	1,750		Jan.-Mar. '59	E. M. D.
	3	B-B	Rd.-Sw.	254,000	1,750			E. M. D.
Chicago, Burlington & Quincy	16	C-C	Rd.-Sw.	349,000	2,400	Dec. '58	Mar.-May '59	E. M. D.
Chicago, Rock Island & Pacific	8	B-B	Rd.-Sw.	240,000	1,750	Nov. '58	Mar. '59	E. M. D.
Colorado & Southern	8	C-C	Rd.-Sw.	325,680	1,750	Nov. '58	Apr. '59	E. M. D.
	4	C-C	Rd.-Sw.	325,680	1,750	Nov. '58	May '59	E. M. D.
	5	B-B	Sw.	247,320	1,200	Nov. '58	Feb. '59	E. M. D.
Detroit & Mackinac	1	B-B	Sw.	88,000	380	Aug. '58	Aug. '58	General Electric
Duluth, Missabe & Iron Range	16	C-C	Sw.	295,000	1,750	Dec. '58		E. M. D.
	6	B	Sw.	387,000	2,400	Dec. '58		Alco
Ferrocarril del Pacifico	1	B-B	Rd.-Sw.	260,000	1,800	Apr. '58	Oct. '58	Alco
	2	B-B	Rd.-Sw.	260,000	1,800	Jul. '58	Dec. '58	Alco
	2	B-B	Rd.-Sw.	260,000	1,800	Dec. '58	1959	Alco

(Continued on page 116)

KEEP YOUR EYE ON CLEVITE

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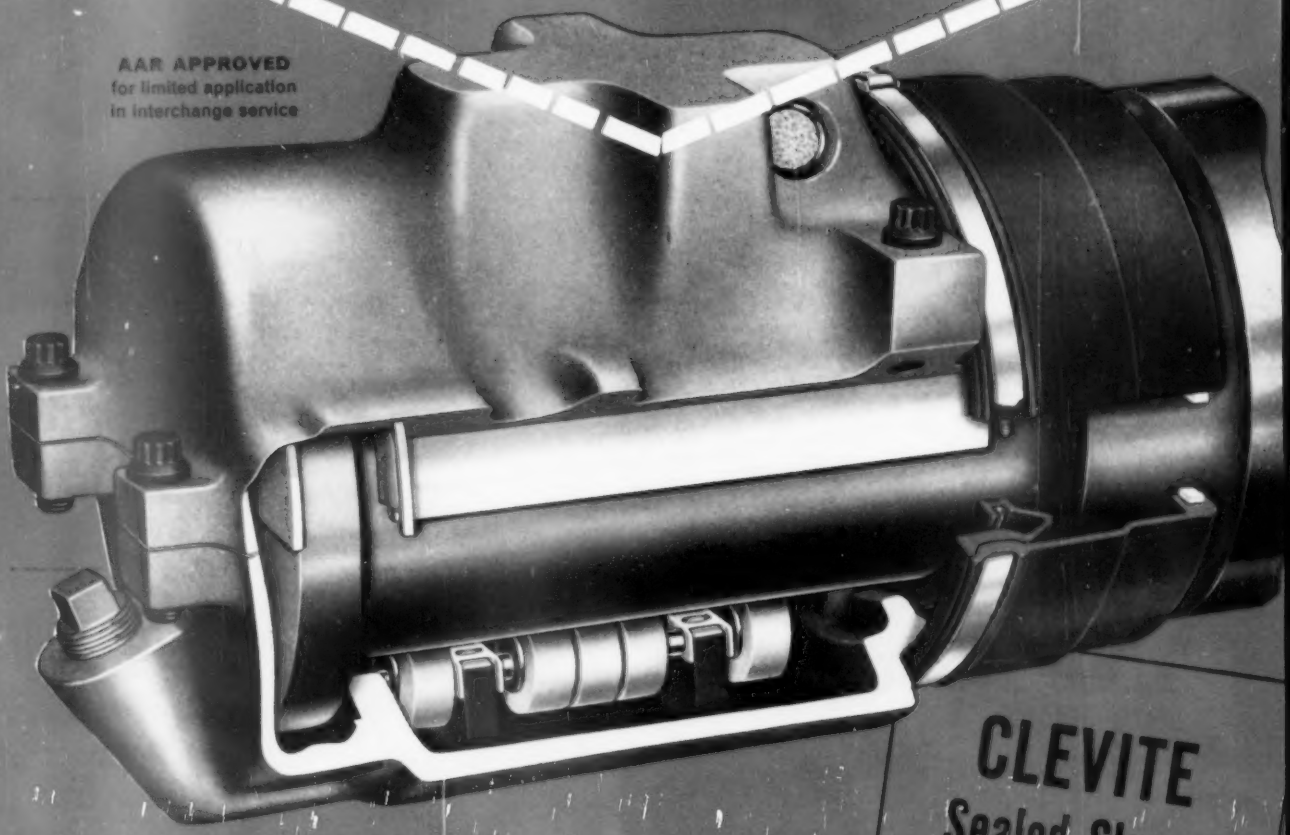
in interchange service



CLEVITE Sealed Sleeve Bearing Cartridge

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Also experience from the growing number of applications shows that Clevite Cartridges require less modification of equipment, are installed at lower cost than any other comparable conversion. ***WATCH FOR MORE TEST RESULTS!***

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LOCOMOTIVE ORDERS

(Continued from page 114)

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Date Ordered	Delivery Date	Builder
Ft. Worth & Denver	4	B-B	Sw.	249,000	1,200	.....	Feb. '59	E. M. D.
Grand Trunk Western	7	B-B	Sw.	245,840	900	Sept. '58	Nov. & Dec. '58	E. M. D.
	5	B-B	Frt.	252,320	1,750	Sept. '58	Nov. '58	E. M. D.
	4	B-B	Pass.	231,590	1,750	Sept. '58	Nov. '58	E. M. D.
Great Northern	10	C-C	Rd.-Sw.	330,000	1,750	.....	Apr. '58	E. M. D.
	5	B-B	Rd.-Sw.	248,000	1,750	.....	Apr. '58	E. M. D.
Illinois Central	20	0-4-4-0	Rd.-Sw.	246,000	1,750	Oct. '58	Dec. '58	E. M. D.
Long Island	2	B	Sw.	51,000	150	Feb. '58	May-Aug. '58	General Electric
Minneapolis & St. Louis	14	B-B	Gen. Pur.	246,000	1,500	Aug. '58	Nov. '58	E. M. D.
Narragansett Pier	1	B	Sw.	70,000	275	May '58	June '58	General Electric
New York, Chicago & St. Louis	5	B-B	Rd.-Sw.	240,000	1,750	Nov. '58	Jan. & Feb. '59	E. M. D.
	15	B-B	Rd.-Sw.	240,000	1,750	Nov. '58	Jan. & Feb. '59	E. M. D.
	15	B-B	Rd.-Sw.	240,000	1,800	Nov. '58	Jan. & Feb. '59	Alco
New York, Susquehanna & Western	1	B-B	Sw.	90,000	300	June '58	Aug. '58	General Electric
Norfolk & Western	40	0-4-4-0	Sw.	240,000	1,000	Jul. '58	Jan. '60	Alco
	36	0-4-4-0	Frt.	248,450	1,800	Jul. '58	June '59	Alco
	176	0-4-4-0	Frt.	247,000	1,750	Jul. '58	Jan. '60	E. M. D.
	16	0-4-4-0	Pass.	247,000	1,750	Jul. '58	Dec. '58	E. M. D.
Pacific Great Eastern	2	B-B	Rd.-Sw.	240,000	1,800	Mar. '58	May '58	Mt'l. Loco. Works
	3	B-B	Sw.	230,000	1,000	Mar. '58	Dec. '58	Mt'l. Loco. Works
Southern Pacific	70	.....	.....	.....	.....	Oct. '58	1st Half '59	E. M. D.-Alco
Texas Mexican	1	.....	Gen. Pur.	241,350	1,750	Jun. '58	Oct. '58	E. M. D.
Toledo, Peoria & Western	2	B-B	Rd.-Sw.	248,300	1,800	Oct. '58	Dec. '58	Alco

1958 PASSENGER-TRAIN CAR ORDERS

Purchaser	No.	Type	Length Ft.	Length In.	Construction	Seating Capacity	Weight	Order Date	Delivery Date	Builder
Canadian National	30	St. Gen.	...	...	.....	...	122,500	June '58	Oct.-Dec. '59	General Motors Diesel
Canadian Pacific	3	R. D. C. -1	85	0	Steel	90	119,700	Mar. '58	June '58	Canadian Car
	1	R. D. C. -2	85	0	Steel	70	119,940	Mar. '58	May '58	Canadian Car
Chicago Transit Authority	100	Subway Elevated	48	0	Alum. & Steel	48	41,580	Mar. '58	.....	St. Louis Car
New York Central	22	Twin Flexi-Van Flat	80	1	Steel	...	64,500	Feb. '58	Jun. & Jul. '58	Fruehauf
New York City Transit Auth.	110	Subway	51	6	Welded	44	74,600	Nov. '58	Jul.-Dec. '59	ACF
Spokane, Portland & Seattle	1	Comb. RPO-Baggage Car	85	0	Alum. & Steel	44	136,000	Nov. '58	.....	St. Louis Car
Union Pacific	20	Coach	85	0	Steel	44	.....	Jul. '58	Jul. & Aug. '59	St. Louis Car
	5	Postal	85	0	Steel	...	.....	Jul. '58	Sept. '59	St. Louis Car
	10	Lunch Counter Cafe Lounge	85	0	Steel	...	.....	Jul. '58	May & June '59	St. Louis Car

LOCOMOTIVE ORDERS—EXPORT

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Date Ordered	Delivery Date	Builder
Brazil—Leopoldina	13	B-B	Rd.-Sw.	155,000	875	.....	Aug. '58	E. M. D.
Brazil—Mineira De Viacao	7	B-B	Rd.-Sw.	166,000	1,310	.....	May '58	E. M. D.
	17	B-B	Rd.-Sw.	155,000	875	.....	Sept. '58	E. M. D.
Brazil—Noroeste	38	B-B	Rd.-Sw.	166,000	1,310	.....	May '58	E. M. D.
Brazil—Rio Grande Do Sul	25	B-B	Rd.-Sw.	166,000	1,310	.....	May '58	E. M. D.
Chihuahua al Pacifico	5	B-B	Rd.-Sw.	246,000	1,600	Sept. '58	Feb. & Mar. '59	Fairbanks, Morse
Cuba	1	0-6-0	Sw. ①	70,000	320	Sept. '58	Dec. '58	Canadian Locomotive
Ferrocarriles Nacionales de Mexico	7	B-B	Gen. Pur.	235,500	1,900	Mar. '58	Jul. & Aug. '58	G. M. Diesel
	8	B-B	Gen. Pur.	170,000	1,425	Mar. '58	Aug. '58	G. M. Diesel
	12	C-C	Gen. Pur.	228,000	1,950	Mar. '58	Sept. '58	G. M. Diesel
	1	C-C	Gen. Pur.	228,000	1,950	May '58	Sept. '58	G. M. Diesel
India	6	0-6-0	Sw. ①	80,000	320	Jun. '58	Dec. '58	Canadian Locomotive
Korean National Railways	26	B-B	Rd.-Sw.	156,000	875	.....	Nov. '58	E. M. D.
Nigerian Railways	25	A1A	Rd.-Sw.	176,500	1,310	.....	Jul. '58	E. M. D.
Orinoco Mining Co.	3	C-C	Rd.-Sw.	387,000	1,750	.....	May '58	E. M. D.
Parana Santa Catarina	30	B-B	Rd.	156,000	1,200	Dec. '58	Dec. '58	General Electric
South African Railways	115	1C-C1	Rd.	212,800	1,800	Dec. '58	Oct. '59	General Electric
Southern Peru Copper	4	B-B	Rd.-Sw.	258,000	1,750	.....	Oct. '58	E. M. D.

① All locomotives diesel-electric unless otherwise noted.
① Diesel-hydraulic.

MOTIVE POWER STATISTICS

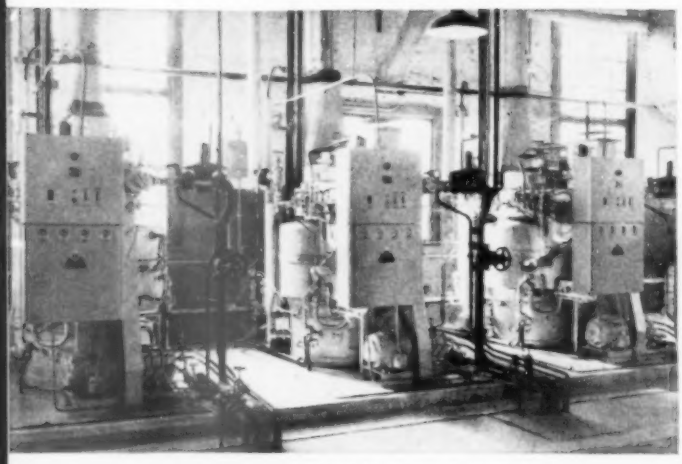
FREIGHT SERVICE	10 Months Ended with October 1957	1958
Road locomotive-miles (000) (M-211):		
Total, steam	20,692	4,503
Total, diesel-electric	368,666	335,574
Total, electric	6,937	5,325
Total, locomotive-miles	398,605	347,388
Gross ton-miles (excluding locomotive and tender)	1,186,921	1,054,670
Train-miles	377,072	331,650

PASSENGER SERVICE	9 Months Ended with September 1957	1958
Road motive-power miles (000) (M-213):		
Steam	2,782	1,179
Diesel-electric	175,556	159,232
Electric	10,348	8,196
Total	188,689	168,607
YARD SERVICE		
Freight yard switching locomotive-hours (000) (-215):		
Steam, coal-burning	1,374	304
Diesel-electric	35,304	30,611
Total	35,415	29,656

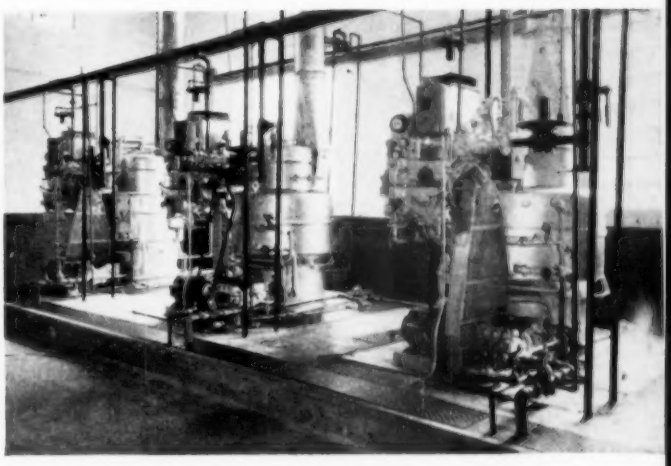
(More on page 120)

Cost checks give simple economic conclusion . . .

CANADIAN NATIONAL and CANADIAN PACIFIC INSTALL MONEY-SAVING VAPOR MODULĀTICS



Nutanna Roundhouse, Saskatoon, Saskatchewan



Sutherland Roundhouse, Saskatoon, Saskatchewan

HERE'S WHAT JUST 3 160 hp VAPOR MODULĀTICS ARE DOING, EVEN IN CANADA'S COLD WEATHER OPERATIONS . . .

CANADIAN NATIONAL REPLACED 4 125 hp LOCOMOTIVE TYPE BOILERS

The four 125 H. P. hand fired locomotive boilers using lignite were replaced with three 160 H. P. Modulatics because this type of equipment could give the best returns on the Capital investment. Because of their small size, these Modulatics fit into one end of the machine shop—enabling CNR to tear down the old boilerhouse.

CANADIAN PACIFIC REPLACED 3 150 hp HRT TYPE BOILERS

Attractive economics strongly favoured the installation of automatic boilers and after careful consideration of all factors, the Modulatic design was selected as being the most suitable for replacing the old hand fired boilers.

These super-efficient, entirely automatic Modulātics provide all the steam requirements (roundhouse, car shops, passenger station, supply shops, washout plant, air compressors, etc.) of these giant Northern Canadian installations.

Modulātic sizes range from 10 to 160 h.p.; pressures from 5 to 300 p.s.i. and much more, if required. Maximum floor load, only 150 lbs./sq.ft. Choice of oil, gas, or combination burners. Steam from cold starts in 2 minutes ends early reporting and standby.

Ask for free 12-page Modulātic Bulletin No. 586

VAPOR HEATING CORPORATION

80 East Jackson Boulevard • Chicago 4, Illinois • Offices in principal cities

(Continued from page 116)

LOCOMOTIVE OWNERSHIP

	12 Mo. 1956	Oct. 1, 1957	Oct. 1, 1958
DIESEL-ELECTRIC UNITS			
Passenger	2,058	2,054	2,032
Freight	8,255	8,309	8,370
Multi-purpose	8,178	9,080	9,550
Switch	7,499	7,596	7,642
Total	26,190	27,039	27,594
GAS-TURBINE-ELECTRIC UNITS			
Freight	25	25	28
ELECTRIC UNITS			
Passenger	238	227	207
Freight	306	323	306
Multi-purpose	15	15	15
Switch	49	41	31
Total	608	606	559
STEAM LOCOMOTIVES			
Passenger	154	265	178
Freight	2,425	1,834	986
Passenger or freight	221	171	109
Switch	654	482	259
Total	3,654	2,752	1,532

NEW SECURITIES ISSUES 1937-1958

(Amounts in thousands of dollars)

Year	Bonds	Stock	Railroad total	Total all Industries	Railroads as per cent of total
1937	344,257		344,257	2,309,524	14.9
1938	54,873		54,873	2,154,664	2.5
1939	185,474	233	185,707	2,164,007	8.6
1940	323,912		323,912	2,677,173	12.1
1941	366,313		366,313	2,666,887	13.7
1942	47,726		47,726	1,062,288	4.5
1943	161,179		161,179	1,169,682	13.8
1944	609,010	350	609,360	3,201,891	19.0
1945	1,453,517	504	1,454,021	6,010,985	24.2
1946	711,119		711,119	6,899,646	10.3
1947	285,680		285,680	6,576,824	4.3
1948	623,348		623,348	7,077,820	8.8
1949	459,982		459,982	6,051,550	7.6
1950	554,100		554,100	6,361,043	8.7
1951	330,021	5,066	335,087	7,741,099	4.3
1952	524,205	1,000	524,205	9,534,162	5.5
1953	302,397		302,397	8,897,996	3.4
1954	478,895	427	479,322	9,516,168	5.0
1955	541,854	5,923	547,777	10,240,155	5.3
1956	380,811	1,201	382,012	10,938,718	3.5
1957	343,647		343,647	12,883,533	2.7
1958*	212,400		212,400	10,015,220	2.1

*10 months total
Compiled by Securities and Exchange Commission

Yard Work Leads Again in '58

How did construction projects fare in the recession year 1958?

To find the answer, Railway Age asked 437 North American railroads for information on projects costing over $1 million. The results are illuminating. They show that the total estimated cost of projects in the $1 million category reported in 1958 was only 4.9 per cent less than that reported in 1957. Included were big investments in yards, new lines, bridges and CTC to further streamline and expedite railroad operations.

Information received showed that more construction projects in the $1 million class were under way last year than in 1957, even though the total amount of money spent was slightly less. In 1958, a total of 146 such projects involving an aggregate expenditure of $638.7 million was reported, which compared with 135 projects totaling $671.7 million in 1957.

Leading again, both in number of jobs and costs, were expenditures for new yards or improvements to existing yards. Such projects represented 35.7 per cent of all reported construction expenditures, with 26 jobs costing $1 million or more under way. Reported complete were 7 projects at a total cost of $31 million.

Track construction took second place in 1958, accounting for 14.4 per cent of the funds reported for projects in the $1 million category. Largest job, by far, was the Canadian National's construction of a branch from Beattyville, Que., to St. Felicien, costing $40.3 million. Next was this railroad's branch from Optic Lake, Man., to Chisel Lake, costing $10.2 million.

Reflecting the federal highway program, grade crossing elimination work accounted for some 9.2 per cent of the money reported. The total expenditure reported for this work was $50.8 million. A multiple-level subway on the Chicago & North Western at Halsted and Green streets, Chicago, with an estimated cost of $10 million, was the largest undertaking in this category.

The railroads were asked to report construction projects costing $500,000 or more that are authorized for 1959. Sixteen roads reported they planned to start 36 such projects with an aggregate cost of $47.4 million. CTC jobs will take the biggest slice of the construction pie in 1959, with $13 million appropriated for this purpose, or 29 per cent of the total.

The largest single CTC project to be undertaken in 1959 will be the Louisville & Nashville's $2.6 million CTC job between Mobile, Ala., and New Orleans, La. The Canadian National, however, reported the largest total CTC authorization, with $7.1 million to be spent on installations throughout the system.

Bridge construction will run a close second this year with 27 per cent of the funds, or $12.2 million, earmarked for 5 jobs costing $500,000 or more. The largest is the Rock Island's project requiring the construction of 7 new bridges over the widened Calumet Sag Channel at Blue Island, Ill. Total cost will be $7.4 million.

Brief descriptions of the projects completed or under way in 1958, costing $1 million or more, follow. Figures in parentheses indicate the percentage of completion at the close of the year.

They are followed by projects costing $500,000 or more that are authorized to be started in 1959.

Jobs Completed or Under Way in 1958

Alaska: New rail-steamship terminal at Seward, Alaska, $6,400,000 (100).

Atchison, Topeka & Santa Fe: Yard improvements at Corwith, Chicago, (100); traffic reversal between Olathe and Lebo, Kan. (100).

Atlantic Coast Line: Removing second track and relaying main track between Dunnellon and Vitis, Fla., $1,193,646 (22).

Baltimore & Ohio: Hawkins Point Marine Terminal, Baltimore, Md., $3,000,000 (31); Locust Point Fruit Terminal, Baltimore, $4,300,000 (100); changes due to Penn-Lincoln Parkway, Pittsburgh, Pa., $4,000,000 (100); new bridge over Arthur Kill, New York, $11,000,000 (25); 23rd Street freight terminal, New York, $1,900,000 (100); Madison Road-Marburg Avenue grade crossing elimination, Cincinnati, Ohio,

$1,900,000 (40); extension of Little Kanawha River spur, Gilmer, W. Va., $1,450,000 (58); changes required by Congress Street Expressway, Chicago, $1,475,000 (35); new yard and engine facilities at Port Columbus (100), and new freight facilities and freighthouse at 4th street, Columbus, Ohio, $1,960,000 (56); reconstruction of 29 bridges at various locations, $2,500,000.

Boston & Maine: New coal handling facilities, Mt. Tom (Holyoke), Mass., $1,200,000 (30).

Canadian National: Main-line diversion between Turcot and Dorval, Que., $4,900,000 (10); replace trestle approach to ore dock with steel viaduct, Port Arthur, Ont., $3,580,000 (15); replace tracks with roadway on Victoria bridge, Montreal, Que., $2,262,000 (100); replace pile trestle with steel viaduct, Edson, Alta., $1,411,000 (15); construct new hump yard and facilities at Moncton, N. B., $15,000,000 (6); additional yard facilities at Corner Brook, N.F., $1,460,000 (25) and St. John's N.F., $1,600,000 (10); new yards at Joffre, Que., $2,630,000 (100) and Sarnia, Ont., $2,814,000 (95); new freight shed and yard at Montreal, $6,400,000 (95); new hump yard and facilities, $28,500,000 (33); new Symington hump yard at Winnipeg, Man., $24,200,000 (4); new yard facilities at Flint, Mich., $2,354,000 (95) and Battle Creek, Mich., $3,974,000 (90); station facilities under the new Queen Elizabeth Hotel, Montreal, $5,484,000 (50); garage for Central Station area and new head office building, Montreal, $15,400,000 (10); construct diesel maintenance shop at Montreal, $3,760,000 (90) and Edmonton, Alta., $3,139,000 (80); combined freight and passenger car repair shop at Transcona, Man., $2,480,000 (2); install CTC on 12 sub-divisions, $12,600,000 (50); spur to serve Caland Ore Company, $2,185,000 (65) and Hogarth Mine, $1,273,000 (65), Atikokan, Ont.; branch lines between Beattyville and St. Felicien, Que., $40,250,000 (85); Sipiwesk and Thompson, Man., $5,385,000 (80), and Optic Lake and Chisel Lake, Man., $10,165,000 (20).

Chicago & North Western: Projects in connection with the Northwest Expressway, Chicago: Relocate main track between North avenue and Division street, $3,500,000 (30); construct multiple-level subway at Halsted and Green streets, $10,000,000 (10), build subway at Jefferson Park and Milwaukee avenue, $5,500,000 (20), and subway at Addison street and Park avenue (5).

Canadian Pacific: Repaired piers, replace steel span and place scour arrestors at Mile 0.8 on the Mission subdivision, $1,975,275 (100); new office building at Henry and Lily streets, Winnipeg, Man., $1,500,000 (100).

Chesapeake & Ohio: Installed two duplex rotary car dumpers and conveyors to deliver coal to a ship loader, including supporting empty car and loaded car yards, Presque Isle, Toledo, Ohio, $7,000,000 (100); replacement of steel spans in viaduct east of Rivanna Jct., Richmond, Va., $7,049,000 (58); line changes at 29 points, including respacing signals, on the Rivanna subdivision, $1,143,200 (100); reconstruct westbound manifest yard at Russell, Ky., $5,463,300 (100); install CTC system between Hinton and Sewell, W. Va., $2,226,170 (30); construct industrial track at Scary, W. Va., $1,410,100 (70); extend and improve facilities in the fabrication and car shops and modernize the reclamation shop at Russell, Ky., $2,171,400 (100).

Chicago, Burlington & Quincy: Hump retarder yard at Cicero, Ill., $6,902,864 (100); line changes and CTC between Hannibal and Macon, Mo., $1,550,509 (100); new freighthouse at Berwyn, Ill., $2,600,000 (100).

Chicago, Rock Island & Pacific: New 10.79-mile line between Winterset and Earlham, Iowa, retiring 25.14 miles of track, $1,108,000 (100); relocate 10.8 miles of main track to provide longer runways at air base, Amarillo, Tex., $1,200,000 (100).

Delaware & Hudson: Relocate approximately 10 miles of main line to a new alinement on the west side of the city and install new connection to Adirondack branch, construct new yard, new diesel locomotive servicing facilities, new passenger and freight station and ten grade separation structures, Saratoga Springs, New York.

Erie: Freight car repair shop and facilities at Meadville, Pa. (100).

Grand Trunk Western: Convert steam locomotive shops to heavy repair shops for diesel locomotives and for diesel servicing and repairs, including fueling facilities, Battle Creek, Mich., $1,200,000 (10); construct a terminal classification yard on new site and revamp a portion of the present Nichols yard for a local industrial yard, Battle Creek, $4,000,000 (85); replace the present Belsay yard with new terminal and industrial classification yard at a new location, including engine and car-servicing facilities, Flint, Mich., $2,460,000 (90).

Great Northern: Line change at Edmonds, Wash., $1,277,000 (100); install CTC between Minot and Williston, N. D., $1,183,000 (75); branch line to serve air base, Glasgow, Mont., $1,182,000 (100).

Jersey Central Lines: Grade crossing elimination at Port Reading, N. J., $1,296,208 (15).

Louisville & Nashville: Modern hump retarder yard with allied facilities at Boyles yard, Birmingham, Ala., $8,600,000 (90) and Hills Park yard, Atlanta, Ga., $9,500,000 (100); install CTC system between Anchorage and Latonia, Ky., $1,700,000 (100).

Missouri Pacific: Branch line 26.72 miles in length, with auxiliary tracks, to serve iron mine being developed by Meramec Mining Company, Cadet to Pea Ridge, Washington county, Mo., $3,913,100 (5); electronically controlled double hump-retarder classification yard, complete with receiving, dispatching and auxiliary yards, including allied facilities to classify cars automatically, Kansas City, Mo., $13,700,000 (40).

New York Central: Electrically controlled freight yard at Buffalo, N. Y., $10,600,000 (99); year-round air conditioning system at the 230 Park Avenue building, New York, $6,487,350 (85); reconstruct Cuyahoga River bridge, Cleveland, Ohio, $5,000,000 (97); underpass carrying tracks over the East Inner Belt Expressway near East 30th street, Cleveland, $1,750,000 (89); two underpasses for grade separation of Brook Park and Smith Road, Cleveland, $2,300,000 (100); east approach to the Central viaduct over tracks of the Cleveland Union Terminal, Cleveland, $6,600,000 (50); spur track and yard facilities for the Ford Motor Company, Brownhelm, Ohio, $1,007,000 (100); new freight yard with supporting facilities at Elkhart, Ind., $21,600,000 (82); Inland Steel Company overpass, Michigan avenue, East Chicago, Ind., $4,000,000 (100); overpass carrying Torrence avenue over tracks at Burnham, Ill., $2,500,000 (100); drawbridge carrying Michigan Central main line over the Little Calumet river, Calumet City, Ill., $2,250,000 (38); yard changes and alterations to buildings and other facilities in connection with construction of the Calumet Skyway toll bridge, Chicago, $1,200,000 (100); underpass carrying Hudson street under tracks at Columbus, Ohio, $1,250,000 (100); Third Street viaduct carrying Columbus Expressway over tracks, Columbus, Ohio, $2,601,000 (50); underpass carrying the Edsel Ford Expressway under tracks of the Detroit Belt Line in the vicinity of Harper avenue, Detroit, Mich., $1,900,000 (90); reconstruct underpass grade separation of Ashland avenue at 40th street, Chicago, $2,500,000 (100).

Norfolk & Portsmouth Belt Line: Vertical-lift bridge across the southern branch of the Elizabeth river at Norfolk, Va., to replace existing swing bridge constructed in 1898, $2,520,000 (100).

Norfolk & Western: New coal storage yard at Lamberts Point, Va., $1,800,000 (100); extend five passing sidings and install additional facilities in the Norton (Va.) yard of the Clinch Valley district, $1,060,000 (100); in-

stall traffic control between Bluefield and Norton, Va., and from Caretta Br. Jct. to Indian, W. Va., $1,890,000 (100); construct 6.55-mile branch line, including operation tracks, $2,300,000 (100); construct 8,240-ft tunnel and 9.96-mile extension to Wilder Spur, including operating tracks, for a coal company on the Dumps Creek branch, $7,700,000 (100); freight car facilities at Roanoke, Va., $2,820,000 (100).

Northern Pacific: Remove second main track and install CTC system between Garrison and Missoula, Mont., $1,400,000 (45).

Pennsylvania: The following projects are reported at a total cost of $84,471,423: Additional yard and enginehouse facilities to permit the abandonment of the East Trenton enginehouse at Morrisville, Pa., (100); undergrade bridge for elimination of a grade crossing at Grove street, Metuchen, N. J. (75); abandon one main track and install CTC between Rockville and Emporium, Pa. (35); vertical-lift bridge over Cuyahoga river, Cleveland, Ohio, (75); additional classification and departure yard at Wheelock, Ohio (20); passenger terminal improvements at Pittsburgh, Pa., (86); yard development at Conway, Pa., (93); extend River branch to Buck Hill, Powhatan, Ohio (92.5); track facilities to serve General Motors Corporation, Marion, Ind. (100).

Quebec North Shore & Labrador: Extension to diesel shop to provide for car-repair operation at Seven Islands, Que., $1,600,000 (85).

St. Louis-San Francisco: Construct hump yard and modernize facilities at West Tulsa, Okla., $5,500,000 (80); modernize and enlarge 19th Street yard at Kansas City, Mo., $1,000,000 (85).

Southern: Extension to Inman yard, Atlanta, Ga., $15,000,000 (98); automated wheel shop machinery in the Coster shops, Knoxville, Tenn., $1,450,000 (95).

Southern Pacific: Construction of permanent railroad roadbed across the Great Salt Lake, consisting of a 13.8-mile rock fill connecting with existing fills, and a single-track railroad with CTC and a 7500-ft siding, to be built across this embankment, $48,939,700 (80); rearrange and relocate tracks and buildings due to the abandonment of ferry service across San Francisco Bay, West Oakland, Calif., $1,853,825 (30); consolidate the eastward yard with the westward yard at Tucson, Ariz., $1,759,485 (55); rearrange sidings and install 124 miles of CTC between Mescal, Ariz., and Lordsburg, N. M., $3,737,985 (40); rearrange sidings and install 140 miles of CTC between Lordsburg and Anapara, N. M., $3,117,780 (2); rearrange sidings and install 25 miles of CTC between Vista and Perth, Nev., $1,255,710 (10).

Virginian: Alterations and improvements to Coal Pier No. 2 at Sewells Point, Va., $3,075,000 (100); install signals for traffic control system between Princeton and Elmore, W. Va., $1,330,000 (100).

Wabash: Modern freight terminal at Chicago, $3,699,000 (100); concrete and steel bridge, 1626 ft long, over Illinois river, Valley City, Ill., $2,805,000 (50); enlarge yards and construct yard office in the Landers yard, Chicago, $3,680,000 (100); construct double-track bridge, 535 ft long, to replace bridge 329 ft long over the Calumet Sag channel, Palos Park, Ill., $1,595,000 (10).

Western Pacific: Relocate the existing main line between Oroville and Intake, Cal., to permit the construction of the Oroville Dam, including construction of three bridges and five concrete-lined tunnels.

Projects Proposed for 1959

Atlantic Coast Line: Replacing existing swing drawspan with a rolling-lift drawspan and approach girder spans, Lake Monroe, Sanford, Fla., $563,715.

Baltimore & Ohio: Reconstruction of Fort Avenue bridge over yard tracks at Locust Point yard, Baltimore, Md., $1,000,000; two railroad bridges account of Calumet Sag Channel improvement, Blue Island, Ill., $2,065,000; strengthening or reconstructing 25 railroad bridges at various locations, $1,150,000.

Canadian National: Combined freight and passenger-car repair shop, Winnipeg, Man., $2,070,000; install CTC on 9 subdivisions and start work on 7 additional projects, $7,050,000; addition to hotel at Halifax, N. S., $2,431,000.

Chicago & Eastern Illinois: Install 40 miles of CTC between Clinton, Ind., and Danville, Ill., $650,000.

Chicago, Rock Island & Pacific: Seven new bridges over the Calumet Sag Channel as widened to 225 ft and construct a new interlocker tower, Blue Island, Ill., $7,400,000.

Erie: Replace an existing double-track bridge superstructure with one of modern design, Port Jervis, N. Y.

Great Northern: Line change, Wheelock, N. D., $609,000; install CTC between Brookston, Minn., and Kelly Lake, Minn., $1,655,550, and between Dodson and Pacific Junction, Mont., $992,000.

Louisville & Nashville: Flat switching yard with allied facilities in Wauhatchie yard, Chattanooga, Tenn., $4,600,000; mechanical and yard facilities in Goulding yard, Pensacola, Fla., $665,000; CTC between Mobile, Ala., and New Orleans, La., $2,605,000.

Missouri Pacific: Raise approximately 4.43 miles of main track and replace seven trestles over Talala, Double and California creeks due to construction of Oologah Dam and reservoir, Oologah, Okla., $1,250,000.

New York Central: Construct nine miles of track to serve tipple and washer for the Tasa Coal Company, Pecan, Pa., $950,000.

New York, New Haven, & Hartford: Additional diesel repair facilities, New Haven, Conn., $790,000.

Norfolk & Western: Additional grain storage of 950,000-bushel capacity, Sewells Point, Va., $960,000; make changes in roadbed and drainage structures to permit construction of dam at Greenup, Ky., $895,000.

Oakland Terminal: Rebuild approximately one mile of street railway replacing existing double track with a single track consisting of 112-lb welded rail, Oakland, Calif., $900,000.

Pennsylvania: The following projects have been authorized at a total cost of $2,366,100: Additional facilities at coal pier, Sodus Point, N.Y.; 65-ft plate-fulcrum track scale of 400-000-lb capacity, Marion, Ind.; Penn Center development between 15th and 16th streets and between Market street and Pennsylvania boulevard, Philadelphia; rearrange tracks in Mantua yard, Philadelphia; automatic flashing-light highway-crossing signals at six streets, York, Pa.; spot car-repair facilities for Class IV freight cars, Conway, Pa.; proceed with Step 2 in Ledge Yard project, Wheelock, Ohio; changes due to Grand Rapids Expressway, Grand Rapids, Mich.; supporting yards and facilities for the new Philadelphia Electric power plant, Eddystone, Pa.

St. Louis-San Francisco: New main track for eastbound freight, Springfield, Mo., $580,000.

Southern: Line and grade revision at Milltown, Ind., $800,000.

Southern Pacific: Construct new warehouse and rearrange tracks at the general shops, Los Angeles, Cal., $511,785; install one-spot car-repair facility, Roseville, Cal., $771,280.

Texas & New Orleans: Sixteen additional bowl tracks in a gravity switching yard, $611,000, and a one-spot car-repair facility in the Englewood Yard, Houston, Tex., $765,000, new freight station facilities, Avondale, Tex., $508,000.

Handy Reference to Railroad Associations

The following list gives names and addresses of secretaries and dates and places of next or regular meetings.

AIR BRAKE ASSOCIATION.—John B. Ball, 224 S. Lincoln Ave., Aurora, Ill. Annual meeting, September 21-25, Hotel Sherman, Chicago.

ALLIED RAILWAY SUPPLY ASSOCIATIONS.—J. D. Ristine, 80 E. Jackson Blvd., Chicago 4. Exhibit in conjunction with Coordinated Mechanical Association meeting, September 20-23, Hotel Sherman, Chicago.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—W. R. Paul, Seaboard Air Line, Richmond 27, Va. Annual meeting, May 18-20, Leamington Hotel, Minneapolis.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—R. D. Branch, Hotel Manhattan, 44th St. & 8th Ave., New York.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Mrs. Ruth Weggeberg, Room 835, 431 S. Dearborn St., Chicago 5. Annual meeting, June 2-4, La Salle Hotel, Chicago.

AMERICAN ASSOCIATION OF TRAVELING PASSENGER AGENTS.—R. T. Mollenkopf, Wabash, 1448 Railway Exchange Bldg., St. Louis 1.

AMERICAN COUNCIL OF RAILROAD WOMEN.—Catherine Sullivan, Meredith & Higbee, 2105½ Fifth St., Meredith, Iowa.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—N. S. Hibshman, 33 W. 39th St., New York 18. Annual general meeting, February 1-6, Hotel Statler, N. Y. Committee on Land Transportation, G. J. Sundheim, Jr., Chesapeake & Ohio Ry., 1601 Terminal Tower, Cleveland.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Mrs. Ruth Weggeberg, Room 835, 431 S. Dearborn St., Chicago 5. Annual meeting, September 14-17, Conrad Hilton Hotel, Chicago.

AMERICAN RAILWAY CAR INSTITUTE.—W. A. Renz, 30 E. 42nd St., New York 17.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—J. B. Horton, Milwaukee Road, Union Station, Chicago 6. Annual meeting, May 24-27, Royal York Hotel, Toronto, Ont.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5. Annual meeting, March 9-11, Hotel Sherman, Chicago.

AMERICAN RAILWAY MAGAZINE EDITORS ASSOCIATION.—R. J. Schenk, Elgin, Joliet & Eastern, Joliet. Annual meeting, October 21-23, Hilton Hotel, Fort Worth.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—E. T. Hoather, 2000 Massachusetts Ave., N.W., Washington 6, D. C. Annual meeting, September 22-25, Shoreham Park Hotel, Washington, D. C.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, 1916 Race St., Philadelphia 3. Committee Week, February 2-7, Penn-Sheraton Hotel, Pittsburgh. Annual meeting, June 21-26, Chalfonte-Haddon Hall, Atlantic City. Pacific Area meeting (with exhibit), October 31-Nov. 6, Sheraton-Palace Hotel, San Francisco.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. B. Schutz, II, 29 W. 39th St., New York 18. Annual meeting, November 29-December 4, Chalfonte-Haddon Hall, Atlantic City.

RAILROAD DIVISION.—R. T. Wilson, American Brake Shoe Company, Mahwah, N. J. Next meeting, April 6-9, Sheraton Hotel, Chicago.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—W. A. Pentzer, 839 Seventeenth St., N.W., Washington 6, D. C. Annual meeting, April 26-29, Statler Hilton, Buffalo.

ASSOCIATED TRAFFIC CLUBS OF AMERICA.—J. B. Palmer, Texas & Pacific, 140 S. Dearborn St., Room 965, Chicago 3. Annual meeting, September 21-22, Lord Baltimore Hotel, Baltimore.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. H. Berglregger, 2039 Randolph St., St. Paul 4. Annual meeting, September 22-24, St. Paul Hotel, St. Paul.

ASSOCIATION OF AMERICAN RAILROADS.—Stanley J. Sharp, Transportation Bldg., Washington 6, D. C. Transportation and Maintenance Department, R. C. Mayo, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—A. J. Cilluffo, 59 E. Van Buren St., Chicago 5.

Communications Section.—H. A. Faton, 59 E. Van Buren St., Chicago 5.

Operating Section.—F. J. Parker, 59 E. Van Buren St., Chicago 5.

Communications Section.—A. H. Groffmann, 59 E. Van Buren St., Chicago 5. Annual meeting, May 14-16, Netherland-Hilton Hotel, Cincinnati.

Car Service, Mileage and Per Diem Section.—W. F. Todd, 59 E. Van Buren St., Chicago 5. Annual meeting, September 29-October 1, Netherland-Hilton Hotel, Cincinnati.

Freight Loss and Damage Prevention Section.—G. H. Rubke, 59 E. Van Buren St., Chicago 5.

Freight Station Section.—W. F. Todd, 59 E. Van Buren St., Chicago 5. Annual meeting, May 5-7, Palmer House, Chicago.

Medical and Surgical Section.—F. J. Parker, 59 E. Van Buren St., Chicago 5. Annual meeting, April 14-15, Drake Hotel, Chicago.

Protective Section.—F. J. Parker, 59 E. Van Buren St., Chicago 5. Annual meeting, June 9-11, Hotel Statler Hilton, Buffalo.

Safety Section.—F. J. Parker, 59 E. Van Buren St., Chicago 5. Annual meeting, May 19-21, Hotel Sheraton, Philadelphia.

Electrical Section of the Engineering and Mechanical Divisions.—C. C. Elber, 59 E. Van Buren St., Chicago 5. Annual meeting, June 23-25, Hotel Sherman, Chicago.

Engineering Division.—E. G. Gehrke, 59 E. Van Buren St., Chicago 5.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5. Annual meeting, March 9-11, Hotel Sherman, Chicago.

Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5. Annual meeting, October 12-14, Hotel Statler, Washington, D. C.

Mechanical Division.—F. H. Stremmel, 59 E. Van Buren St., Chicago 5. Annual meeting, June 23-25, Hotel Sherman, Chicago.

Purchases and Stores Division.—John L. Timanus, Transportation Bldg., Washington 6, D. C. Annual meeting, June 8-10, Palmer House, Chicago.

Freight Claim Division.—R. E. O'Donnell, 59 E. Van Buren St., Chicago 5. Annual meeting, May 12-14, Fontainebleau Hotel, Miami Beach.

General Claims Division.—Bruce D. Smith, 59 E. Van Buren St., Chicago 5. Annual meeting, May 20-22, Grove Park Inn, Asheville, N. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—Arthur R. Seder, Vice-president, Transportation Bldg., Washington 6, D. C.

Accounting Division.—Philip A. Lyon, Transportation Bldg., Washington 6, D. C. Annual meeting, June 8-10, Netherland Hilton Hotel, Cincinnati.

Treasury Division.—Philip A. Lyon, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS.—Mrs. M. L. Urmey, Executive Secretary, 1112 ICC Building, Washington 25, D. C. Annual meeting, May 14-15, Dinkler Plaza Hotel, Atlanta.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—A. W. Eckstein, Illinois Central, 135 E. Eleventh Pl., Chicago 5. Annual meeting, May 10-12, Queen Elizabeth Hotel, Montreal; May 13-14, Chateau Frontenac, Quebec; May 15, Chateau Laurier, Ottawa.

ASSOCIATION OF TRACK AND STRUCTURE SUPPLIERS.—P. J. Wolf, Maintenance Equipment Co., 80 E. Jackson Blvd., Chicago 4. Exhibit, September 14-17, Coliseum, Chicago.

CANADIAN RAILWAY CLUB.—W. J. Cadogan, Canadian National Railways, P. O. Box 162, Montreal 3, Quebec. Regular meetings, second Monday of each month, except June, July and August, Queen Elizabeth Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—J. J. Murphy, 4266 Humphrey St., St. Louis 16. Regular meetings first Tuesday of each month except June, July and August, Hotel Claridge.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. W. Gebhardt, 297 Highland Ave., Elmhurst, Ill. Annual meeting, September 21-23, Hotel Sherman, Chicago.

CAR FOREMAN'S ASSOCIATION OF OMAHA, COUNCIL BLUFFS AND SOUTH OMAHA INTERCHANGE.—C. G. Poetzel, Chicago & North Western, 11th St. and Avenue J., Council Bluffs, Ia. Regular meetings, second Thursday of each month, except July and August, Chieftain Hotel, Council Bluffs.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—R. C. Berglund, 8215 Drexel Ave., Chicago 19. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel.

CENTRAL RAILWAY CLUB OF BUFFALO.—J. A. Gorman, Room 17, 2nd floor, Hotel Statler Hilton, Buffalo 5. Regular meetings, second Thursday of each month except June, July and August, Hotel Statler Hilton.

CHICAGO RAILROAD DIESEL CLUB.—F. C. Foelick, 225 Illinois Blvd., Hoffman Estates, Roselle, Ill. Regular meetings first Thursday after first Sunday of each month except July and August, Hotel Sherman, 7:30 p.m.

CHICAGO RAILROADS CAR ACCOUNTING OFFICERS.—C. F. Sandberg (Chairman) Rock Island RR, 704 Stewart Ave., Chicago 21. Regular meetings last Wednesday of each month, except July and August, Traffic Club, Palmer House, at 12:15 p.m.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—C. C. Robinson, Monon RR, Lafayette, Ind. Spring meeting, May 7-8, Queen Elizabeth Hotel, Montreal.

EASTERN CAR FOREMAN'S ASSOCIATION.—F. Frey, Central of New Jersey, Room 32, Jersey City Terminal, Jersey City 2. Regular meetings, second Fri. day of January, February, March, April, May, October and November, Railroad Machinery Club, 30 Church St., New York. Annual outing, second Thursday in July, Race Brook Country Club, Orange, Conn.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Ticeomb, 1721 Parker St., North Little Rock, Ark. Annual meeting, September 21-23, Hotel Sherman, Chicago.

MAINTENANCE OF WAY CLUB OF CHICAGO.—S. Kosco, Illinois Central, 135 E. Eleventh Place, Chicago 5. Regular meetings, October through April, Hamilton Hotel, Chicago.

METROPOLITAN MAINTENANCE OF WAY CLUB.—Gordon Rogers, Simmons-Boardman Publishing Corp., 30 Church St., New York 7. Meets in February, April, October and December, Railroad Machinery Club, 30 Church St., New York. Next meeting, February 26.

MILITARY RAILWAY SERVICE VETERANS.—F. W. Okie, Bessemer and Lake Erie, P. O. Box 536, Pittsburgh 30. Annual reunion, September 18-20, Leamington Hotel, Minneapolis.

MISSISSIPPI VALLEY MAINTENANCE OF WAY CLUB.—W. F. Engle, 2125 Scott Ave., St. Louis. Regular meetings second Monday of each month September through May, Coronado Hotel, St. Louis.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—R. Everette Kreeger, 5110 ICC Bldg., P. O. Box 684, Washington 4, D. C. Annual meeting, October 12-15 Bellevue-Stratford Hotel, Philadelphia.

NATIONAL ASSOCIATION OF RAILROAD ENGINEERS OF TEXAS.—R. A. Boerke (Chairman) Chicago, Burlington & Quincy, Aurora, Ill. Next meeting, March, Hotel Sherman, Chicago.

NATIONAL ASSOCIATION OF RAILWAY BUSINESS WOMEN.—Miss Lottie Brown, Illinois Central, 1957 Madison Ave., Memphis 4. Annual meeting, May 21-24, Bellevue Stratford Hotel, Philadelphia.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—R. S. Wright, Carborundum Co., Box 337 Niagara Falls, N. Y. Postponed 1958 meeting, February 11, Sheraton Jefferson Hotel, St. Louis. Annual meeting, October 6-8, Jung Hotel, New Orleans.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Lilt. M. Beauchamp, Suite 728, 1001 Connecticut Ave., Washington 6, D. C. Annual meeting, October 12-14, Olympic Hotel, Seattle.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—L. J. Dorr, Suite 909, Sheraton Bldg., 711 14th St., N.W., Washington 5, D. C. Annual meeting, November 12-13, Palmer House, Chicago.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—J. P. Kleinkort, American Brake Shoe Co., 155 N. Wacker Dr., Chicago 6. Lewis Thomas, Asst. Secy., 59 E. Van Buren St., Chicago 5.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—G. C. Stoutsose, Atlantic Coast Line, Wilmington, N. C. Annual meeting, October 20-22, Hotel Morrison, Chicago.

NEW ENGLAND RAILROAD CLUB.—William M. Mc-Combs, 35 Lewis Wharf, Boston 10. Regular meeting, second Tuesday of each month, except May-September, incl., Hotel Vendome, Boston. Annual banquet second Thursday of May each year.

NEW YORK RAILROAD CLUB.—W. P. Dizard, 30 Church St., New York 7. Regular meetings, third Thursday of each month except June, July, August, September and December, Century Room, Commodore Hotel. Reception 6 p.m.; dinner, 7; meeting, 8:15. Annual dinner, December 10.

NORTHWEST CARMEN'S ASSOCIATION.—N. J. Maglich, Minnesota Transfer Ry., 2071 University Ave., St. Paul 4, Minn. Regular meetings, first Monday of each month except June, July, August, Midway Club, 1931 University Ave., St. Paul.

NORTHWEST LOCOMOTIVE ASSOCIATION.—W. N. Cox, P. O. Box 5346, St. Paul 1, Minn. Regular meetings, fourth Tuesday of January, May and September, Hotel Nicollet, Minneapolis; fourth Tuesday of March and November, Hotel St. Paul, St. Paul.

NORTHWEST MAINTENANCE OF WAY CLUB.—L. C. Blanchard, Milwaukee, Passenger Depot, Minneapolis 1. Regular meetings, fourth Thursday of each month, September through April, inclusive, except November and December which are third Thursday, Midway Club, 1931 University Ave., St. Paul.

PACIFIC RAILWAY CLUB.—S. E. Beler, 121 E. Sixth St., Los Angeles 14. Meetings in alternate months in San Francisco and Los Angeles. One meeting a year at Sacramento and at Roseville.

RAILROAD PUBLIC RELATIONS ASSOCIATION.—H. H. Baetjer, Association of American Railroads, Transportation Bldg., Washington 6, D. C. Annual meeting, June 5-7, Sun Valley, Idaho.

RAILWAY CLUB OF PITTSBURGH.—G. F. Morrison, 2310 Koppers Bldg., Pittsburgh 19. Regular meetings third Thursday of each month, except June-September, incl., and December, Hotel Sherwyn. Dinner, 6:30 p.m.; meeting, 8.

RAILWAY COMMUNICATIONS SUPPLIERS ASSOCIATION.—G. A. Nelson, 30 Church St., New York 7.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—L. R. Oswald, Transquip Corp., 919 N. Michigan Ave., Chicago 11.

RAILWAY FUEL AND OPERATING OFFICERS ASSOCIATION.—L. B. Peters, New York Central, Room 1213, 139 W. Van Buren St., Chicago 5. Annual meeting, September 21-23, Hotel Sherman, Chicago.

RAILWAY PROGRESS INSTITUTE.—T. A. Nooner, Jr., First National Bank Bldg., Chicago 3. Annual meeting, November 18-19, Conrad Hilton Hotel, Chicago.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 527 Lexington Ave., New York 17.

RAILWAY SYSTEMS AND PROCEDURES ASSOCIATION.—E. F. Hayne, Exec. Dir., Room 357, Union Station, Washington, D. C. Next meeting, March 17-19, Hotel Morrison, Chicago.

RAILWAY TIE ASSOCIATION.—R. M. Hamilton, 1221 Locust St., St. Louis 3. Annual meeting, October 29-30, Netherland Hilton, Cincinnati.

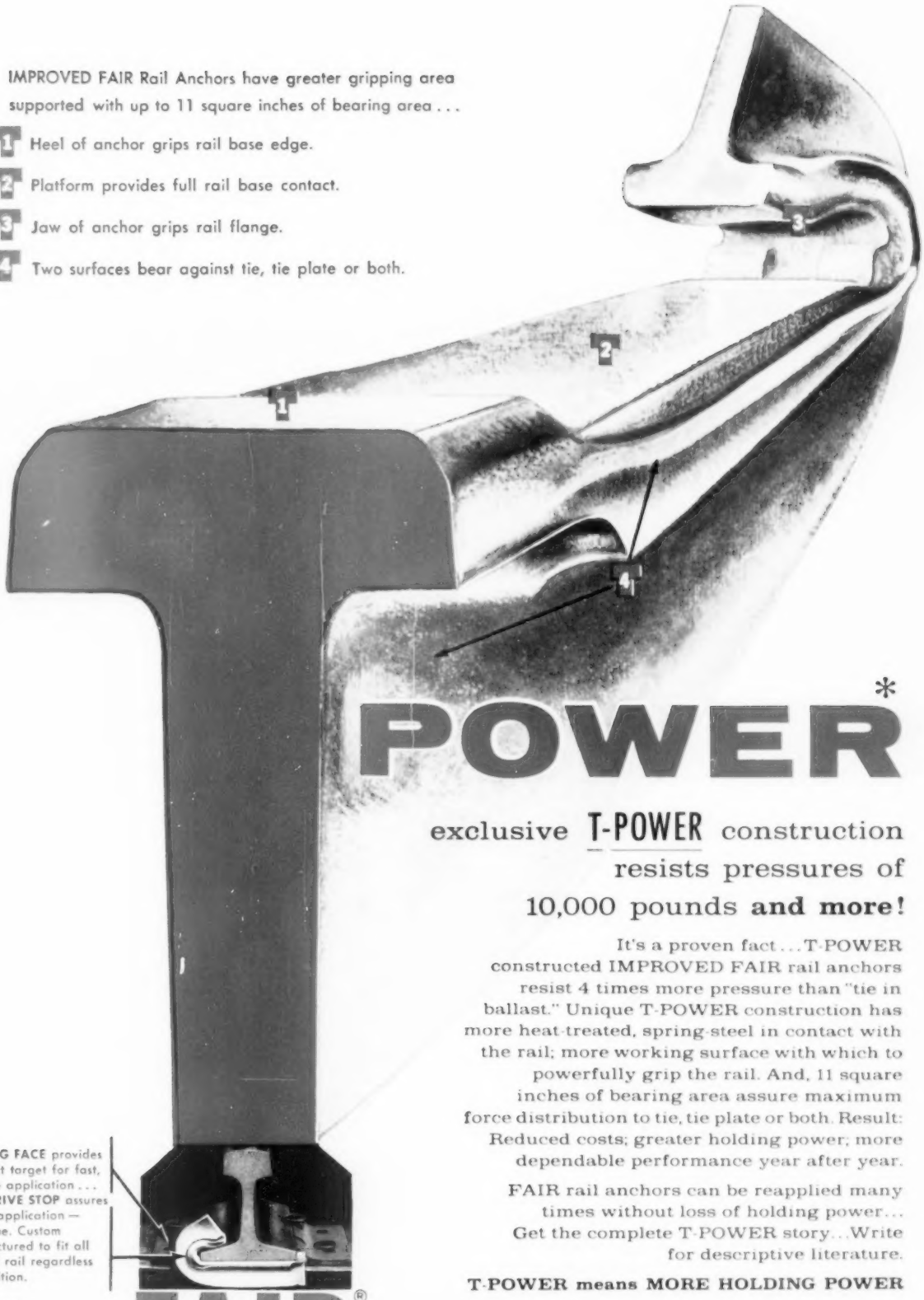
ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Mrs. Ruth Weggeberg, Room 835, 431 S. Dearborn St., Chicago 5. Annual meeting, September 15-17, Conrad Hilton Hotel, Chicago.

(Continued on page 142)

642

IMPROVED FAIR Rail Anchors have greater gripping area supported with up to 11 square inches of bearing area . . .

1. Heel of anchor grips rail base edge.
2. Platform provides full rail base contact.
3. Jaw of anchor grips rail flange.
4. Two surfaces bear against tie, tie plate or both.



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exclusive T-POWER construction resists pressures of 10,000 pounds **and more!**

It's a proven fact . . . T-POWER constructed IMPROVED FAIR rail anchors resist 4 times more pressure than "tie in ballast." Unique T-POWER construction has more heat-treated, spring-steel in contact with the rail; more working surface with which to powerfully grip the rail. And, 11 square inches of bearing area assure maximum force distribution to tie, tie plate or both. Result: Reduced costs; greater holding power; more dependable performance year after year.

FAIR rail anchors can be reapplied many times without loss of holding power . . . Get the complete T-POWER story . . . Write for descriptive literature.

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STRIKING FACE provides a perfect target for fast, accurate application . . . **OVERDRIVE STOP** assures proper application — everytime. Custom manufactured to fit all types of rail regardless of condition.

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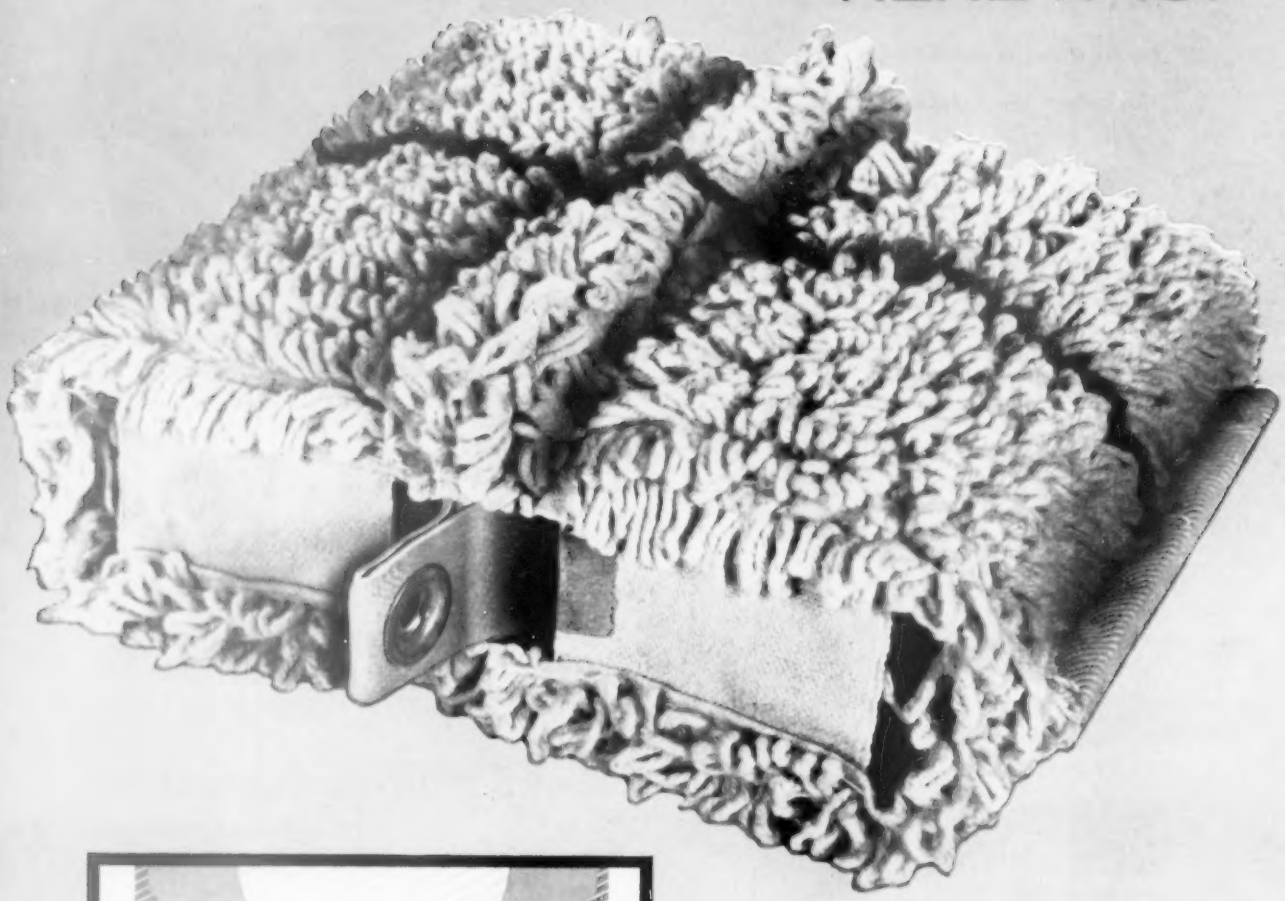
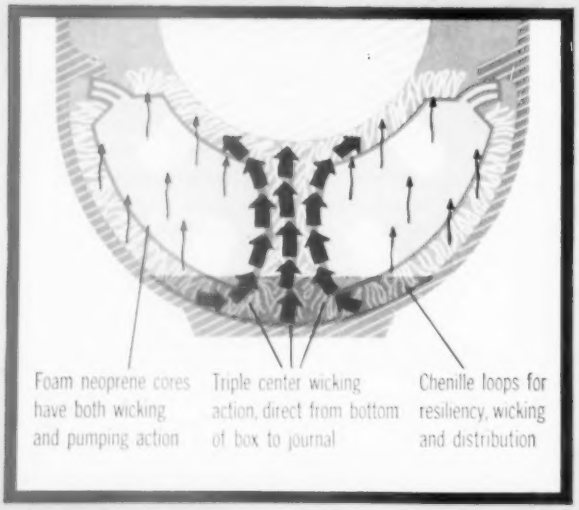
HERE IT IS:





Triple center wicking action feeds an abundant supply of oil to the journal by the most direct path. More oil flows up through the neoprene cores and still more wicks up through the fabric panels, assuring complete saturation of the chenille cover at all times.

A.A.R. Approved for Limited Interchange Service

American Brake Shoe's new ABSCO lubricating pad... with the best of everything!

The Absco journal lubricating pad is the first and only pad to be engineered and produced with *all* the advantages and characteristics that critical railroad men prefer! Check off this impressive combination of features—combined for the first time in the simple, economical Absco pad:

Dimensional accuracy. All parts precisely cut and assembled. Materials pre-shrunk to maintain accurate size, even after renovation.

Strong pull-out strap. Withstands tremendous pull! Double thickness is triple sewn throughout center section, with a brass grommet through double thickness at each end.

Positive wicking action. Special twisted loop chenilling distributes steady flow of oil over entire journal. Specially engineered center section provides additional path for direct wicking action at shortest distance between free oil and journal. Foam neoprene cores provide further wicking capacity.

Identification. Simple stamped brass tag.

Interchangeability. Absco pads fit standard A.A.R. journal boxes. No modifications necessary.

Ease of application. Easily installed. No tools required. Reversible side to side, top to bottom, end for end.

Stability. Sturdy fabric retainers resist shifting, even at low temperatures.

Resilience. Foam neoprene cores, specially compounded for high resilience with great resistance to set. The compressible chenille loops add to overall resilience.

Ease of renovation. Built to withstand roughest cleaning methods. No delicate or heavy metal parts to break or tear loose.

Long life. Accelerated life tests indicate durability far in excess of the present renovation interval, even under extreme service conditions.

Non-linting. Thoroughly washed and pre-shrunken cotton wicking material was especially selected for its non-linting characteristics.

One piece. No separate pieces or retainers.

Minimum metal. The only metal parts are the two brass grommets and the brass identifying tag.

Oil retention. Our tests show fully soaked pads retain approximately 2,000 grams of oil after 3 hours draining.

Ruggedness. Built to take the toughest treatment—during installation, operation, removal, and renovation. Nylon stitching throughout.

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530 Fifth Avenue, New York 36, New York

AMERICAN Brake Shoe COMPANY

P&S OFFICERS 'TRIM FAT'

(Continued from page 38)

store for the same type of light bulb the railroad pays 20¢ for when purchased in quantity. The price differential, to justify local purchases, must at least equal the cost of handling, recording, storing and distributing such items from railroad store stock.

Blanket ordering is another term which came into wide use during the past year. It describes a procedure which shows promise of becoming even more widely used in the years to come.

It is another procedure designed to keep inventory down and simultaneously maintain working capital. Under it a railroad will order, for example, a year's supply of a commodity. Rather than taking delivery in a single shipment, the order is placed with the supplier and then drawn upon periodically throughout the year. The supplier, in such a case, has a commitment from the railroad that it will purchase, during the year, a specific quantity of goods. He can schedule his production accordingly. The railroad, on the other hand, can take delivery on an as-needed basis, eliminating the need for maintaining an inventory. The supplier, in effect, then, maintains the inventory for the railroad. The method has the added advantage of billing upon delivery. A railroad, therefore, can spread its expenditure for the commodity over the year instead of making a single outlay when the order is placed.

The bulk of materials used by railroads, however, are still handled as in the past—delivered to the stores locations and distributed as needed. The less such materials need to be handled, the lower the stores costs. Improvement in methods of materials handling has, therefore, been a long-time goal in stores operations. Most railroads stores have kept pace with the times in mechanizing their handling of materials, using fork lift trucks, mechanized cranes and hoists, conveyors and other labor-saving devices.

The dearth of funds in the year just past brought some programs for further improvement of materials handling techniques to a halt. Old equipment was called upon to perform extra duty. Often, when new equipment was needed, plans had to be shelved and ingenious makeshift arrangements were devised to fill the gap. Again, however, there was a bright side to the picture. Stores men learned how to utilize their equipment to the fullest extent. This knowledge will be of even greater worth in the year ahead.

Packaging became of prime consideration. More and more suppliers were called upon to deliver goods in units, on pallets, or bundled (as in the case of lumber), to facilitate handling and storage and to lower costs.

The stockbook is apparently on its way out. Materials catalogs, prepared by electronic accounting machines, are replacing the stockbook on many roads. Quantities are recorded on cards, tape or in the memory circuits of electronic computers. Taking inventory, previously an annual headache, is rapidly becoming a case of just feeding stacks of cards into a machine. Individual items bear numbers for identification which can be translated into complete item descriptions. Some roads have indexed their numbering system on the basis of AAR's Standard Material Classification. Others have abandoned that method and are using classifications of their own. This, unfortunately, has resulted in different coding systems for different roads. A standardized system for the industry could greatly simplify accounting and lower manufacturing costs.

High Cost of Being Different

The purchasing agent is in the ideal position to spot the inconsistencies of specifications and note the high costs of non-standardization. Last year a committee report of the AAR's Purchases and Stores Division cited in dollars, the actual costs to railroads of not standardizing rail sections, car frame members, truck sideframes and bolsters.

At this year's meeting, the Division's Committee on Simplification and Standardization promises to explode an equally potent charge as the high costs of not standardizing additional items are brought to light.

More and more, purchasing and storekeeping practices proven in other industries have been remolded to fit railroad operations. To a great extent this has been brought about by some "outsiders" who recently entered the railroad field. With them they brought their experiences of buying and maintaining inventories in manufacturing and other industries. While not all such practices lend themselves to railroad operations, many have been adopted with good results.

Some purchases and stores men, at first somewhat resentful of this "invasion from the outside," listened first with doubt and later with respect to some of the new theories. At this year's annual Purchases and Stores Division meeting, speakers will be called upon from other industries to address the membership for the first time.

The future looks bright. New ideas, new methods, better equipment, improved training programs—all promise a more efficient and economical purchases and stores job in the future.

LABOR: A TROUBLED YEAR

(Continued from page 28)

road officer pointed out last year, was a major omission in the moratorium agreement negotiated in 1956-57. The railroads neither bargained for nor obtained productivity gains in keeping with the wage gains granted the brotherhoods.

Another carrier officer phrased it another way: "I do not consider that any class of employee in the railroad industry is overpaid. However, our labor agreements have required the continuance of more employees than the services require. Our method of payment puts a premium on inefficiency . . . The greatest losses of our transportation dollar, from an operating standpoint, are (a) those payments which require allowances over and above that which the employee would get under the concept of a fair day's work, and (b) the job-preserving restrictions of our agreements."

Labor's counter has been a defense of employee productivity and a slashing attack on what might be termed management productivity. That latter campaign has brought the RLEA into a headon collision with itself, but it hasn't backed off an inch in its attacks. In two releases dated little more than two months apart, RLEA declared that "the financial position of the railroads is excellent" but that "the industry is probably more mismanaged today than ever before."

Wage and 'Fringe' Demands

The "excellent" financial position apparently will be justification for demanding wage and fringe benefit increases. The "mismanagement" charges —covering a wide range of maintenance and operating methods—apparently will be justification for seeking higher and more stable levels of employment. Even now, the RLEA is soliciting reports from railway employees on cases where the employee believes his road—or any road in his area—is trying to turn away business, freight or passenger.

Generally, then, the outlook for 1959 is not an attractive one, so far as peaceful labor-management relations are concerned. From the aggressive program launched by RLEA this far in advance of negotiations, it's clear that union leaders won't show any shortage of demands. The situation could get out of hand, to a point where no compromise is possible without considerable back-tracking and losing of face. And if that happens, then peaceful agreement may become an impossibility.

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(or when you re-build)
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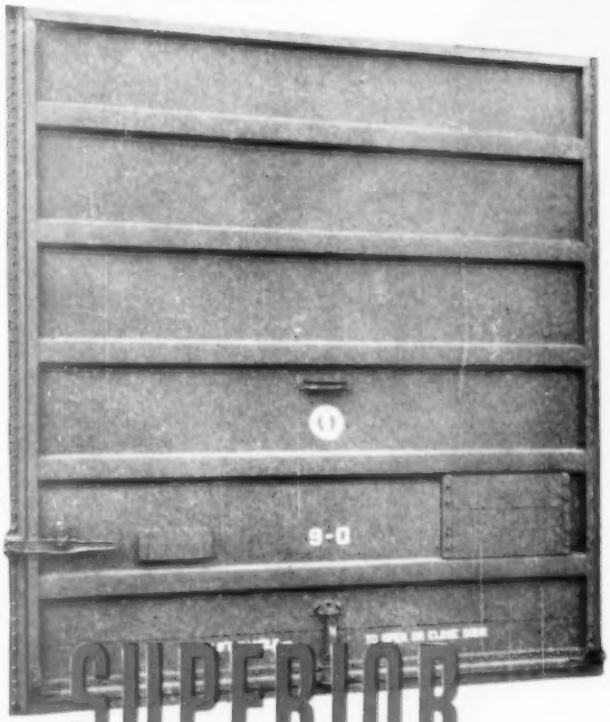

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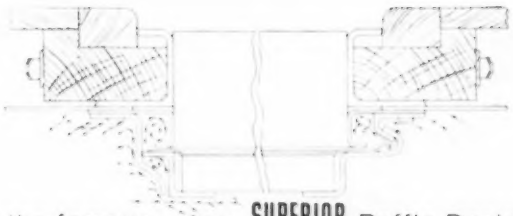

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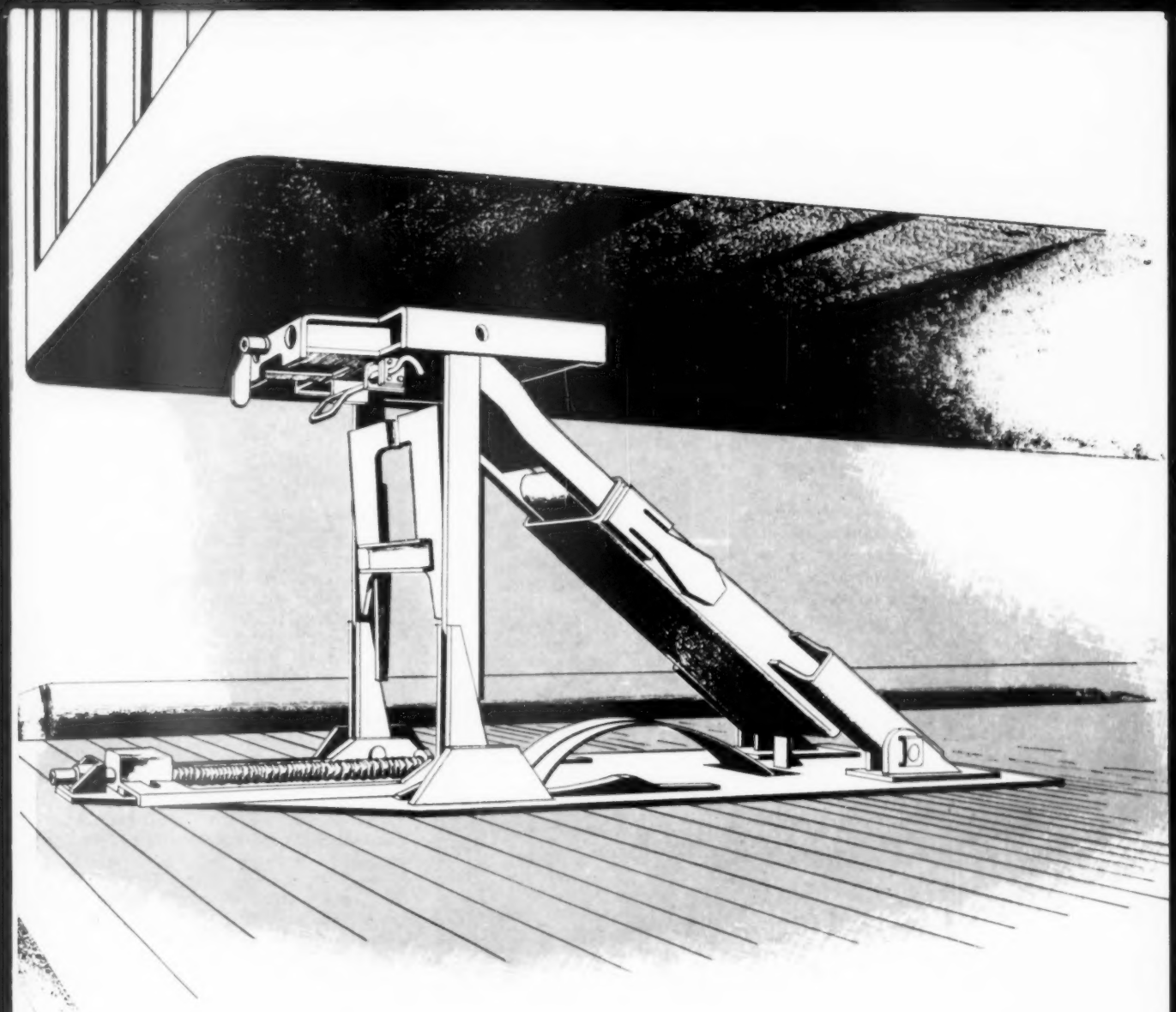

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LOW COST! standard price for the acf Trailer-Hitch is only $995. FOB Berwick, Pa.

FLEXIBILITY! handles any standard highway trailer without special attachments.

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IMMEDIATE DELIVERY for installation on your present cars as well as on new flat cars. For full information and specifications get in touch with your nearest acf office or Dept. RA-1, American Car and Foundry, Division of acf Industries, Incorporated, 750 Third Avenue, New York 17, N. Y.

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Letters from Readers

A Great Service

Louisville, Ky.

To the Editor:

I am much impressed with the force of your article on "Political Realism and the Passenger Business" and also your editorial styled "Stop Creeping Nationalization—Now!" in your January 5 issue. You do a great service to the railroad industry—keeping truth, on vital subjects, before it in a dramatic, forceful way and by pushing constantly for action by people with a stake in the industry and by Congress. For your many good works you have my many thanks.

W. L. Grubbs
Vice President and General Counsel
Louisville & Nashville Railroad

Telling the Story

San Francisco, Cal.

To the Editor:

Referring to the article entitled "Here's How One Road Drew a Crowd With Its Story," in the December 8 issue of Railway Age:

As mentioned in the sub-caption, "It's something other roads may want to pick up and use." It would definitely have far reaching results in bringing to the attention of railroad patrons and others that use our main terminals, the plight of all roads due mainly to the subsidies granted our competitors.

Also, bringing to the attention of the general public the far reaching benefits gained by them through the railroad employees' compensation from the railroad industry as a whole and other industries, that rely to a certain extent on the healthy foundation of our biggest breadwinner, the extreme importance of continuing their contributions to the various functions of our communities at large.

E. E. Escalle
Chief Clerk-General
Southern Pacific

Talking Shop

St. Paul, Minn.

To the Editor:

It is not often I feel the urge to write to an editor but, having enjoyed reading Railway Age now for several years, I cannot help but write and say—Thank You— for a job well done. Of all the periodicals that pass over my desk, yours is by far the most interesting and educational of them all.

I especially enjoy "Railroading After Hours." How appropriate that title is. I don't suppose there is a single profession in this country where they talk shop, as much after hours as they do on the job, as we in the railroad industry do.

W. H. Goodyear
Auditor Freight Accounts
Northern Pacific

Dividends Declared

DETROIT, HILLSDALE & SOUTH WESTERN.—$2, semiannual, paid Jan. 5 to holders of record Dec. 22, 1958.

NEW YORK & HARLEM.—$2.50, semiannual, paid Jan. 1, to holders of record Dec. 15, 1958.

NORFOLK & WESTERN.—4% adjusted preferred, 25¢, quarterly, payable Feb. 10 to holders of record Jan. 15.

NORTHERN PACIFIC.—50¢, quarterly, payable Jan. 30 to holders of record Jan. 12.

PHILADELPHIA, GERMANTOWN & NORRISTOWN.—$1.50, quarterly, payable Mar. 4 to holders of record Feb. 20.

PITTSBURGH & LAKE ERIE.—$1, paid Jan. 15 to holders of record Jan. 2.

PIEDMONT & NORTHERN.—$1.25, quarterly; $2, extra, both Paid Dec. 23, 1958 to holders of record Dec. 8.

PITTSBURGH, YOUNGSTOWN & ASHTABULA.—$1.75, quarterly, payable Mar. 2 to holders of record Feb. 20.

READING.—resumed, 25¢, payable Feb. 12 to holders of record Jan. 8.

STONY BROOK.—$2.50, semiannual, paid Jan. 10 to holders of record Dec. 31, 1958.

TENNESSEE, ALABAMA & GEORGIA.—50¢, paid Dec. 19 to holders of record Dec. 3.

TEXAS & PACIFIC.—$1.25, quarterly, paid Dec. 31 to holders of record Dec. 23.

WESTERN MARYLAND.—common (increased), 90¢; 4% preferred, $1, quarterly; 7% preferred, $1.75 quarterly; 5% preferred, 37½¢, quarterly, all paid Dec. 30 to holders of record Dec. 19.

WESTERN PACIFIC.—75¢, quarterly, payable Feb. 16 to holders of record Feb. 2.

WHEELING & LAKE ERIE.—$1.43¾, quarterly, payable Feb. 2 to holders of record Jan. 9.

LOADINGS TO RISE

(Continued from page 48)

traffic. For years this business was thought to be "rail bound." Recently, however, practically all other modes of transportation except the airlines have been nibbling away at coal traffic.

Hence it was certain that railroads would get around to experimenting with coal rates. Last year the Norfolk & Western and the Virginian filed what is for the U. S., at least, a novel system of charges. Under this scheme, the customer estimates what his annual coal demand will be. If his receipts reach that figure, he is entitled to a reduction from the tariff rate.

Here's how this incentive scheme works: Shipments in any one month are billed at 35¢ per net ton below the tariff rate if 1.5 million tons were received in the 12 calendar month period ending two months before the one for which charges are being billed. If, during the period Nov. 1, 1957-October 31, 1958, 1.5 million tons were received, charges on January 1959 shipments would be 35¢ per net ton less than the regular rate.

This tariff now is under investigation by the ICC. When filed, it was suspended by Division 2 of the Commission, on its own motion. The full Commission later agreed to let the rate go into effect, but continued the investigation. Should the scheme finally get a clean bill of health from the ICC, it is almost a foregone conclusion that other similar ones will be tried.

For years there has been discussion of the "paper" rates the railroads have in effect which are permitting their competitors to grab large chunks of presumably profitable traffic. More frequently than not, the railroads' knowledge of just which rates were "paper" was sketchy at best. Some railroads have begun studies to find out which rates move no traffic, and whether the rate itself or some other factor is responsible. The carriers then can decide what they must do to regain any traffic considered desirable.

The past year also was notable for several experiments with new fare schemes in the passenger field. And 1959 will see a continuation of such efforts. Already, the Rock Island has announced that beginning next week it will reduce round-trip sleeping and parlor car (first class) fares by 22 per cent, in an experiment scheduled to last nine months. The Katy and Burlington have announced round trip first class fare cuts of 22 per cent on traffic between selected points. The other western roads reportedly are watching these experiments closely.

FREIGHT CAR OUTLOOK

(Continued from page 43)

● "For expensive, high-premium lading, the sliding or cushioned underframe will be used, obtaining protection up to 12 mph.

"When one gives careful study to the present-day situation," Mr. Olsen continued, "apparently the supplier should hang his head in shame and give credit where credit is due—that is to the railroads, where some have taken the matter into their own hands, and endeavored to develop cushioning devices of greater capacity."

In addition to draft gears and underframes, a series of new load-securing devices were offered to railroads for their cars during 1958. Covered gondola cars and bulkhead flatcars have been increasingly popular and railroads are putting such cars into service with increasing frequency.

While the early months of 1958 showed a hot-box record considerably better than that of the previous year, 1957 was not a year which should have been hard to beat. Performance in 1957 had been the poorest in five years. Unfortunately, the hot box record of the late months of 1958 sagged back to the unhealthy 1957 level.

With reduced servicing and car maintenance forces, it is probable that the growing number of journal lubricator applications is making it possible for railroads to hold the line in this serious situation.

No move has yet been made to extend the January 1, 1960, date when journal lubricators will be required on all cars in interchange service. However, this date is now less than 12 months away. Only 400,000 of the approximately 1,800,000 interchange freight cars have had their loose waste journal packing replaced with the journal lubricating devices now available.

To complete this lubricator program would require installation of these devices at the rate of 130,000 car sets per month for the remainder of 1959. For many months during 1958, railroads were applying them at the rate of 10,000 car sets per month.

Date Will Be Extended

It appears improbable that railroads could buy, or that manufacturers could produce, these devices fast enough to complete elimination of loose waste in 1959. Conclusion: the mandatory journal lubricator date of January 1, 1960, will be extended.

While there has been increasing interest in container-type piggyback, the majority of TOFC cars ordered last year were for handling conventional highway trailers in the conventional way. It appears unlikely that any container system will win such wide acceptance that it can be adopted as a standard in the near future. There seems to be little doubt that more and more of the piggyback cars to be built will approach in length the record-setting 88-ft cars put in service by the Santa Fe in 1958.

Increased size and capacity were characteristics of many of 1958's car designs. In fact, with the emergence of piggybacking, the problem of supplying railroad transportation for smaller loads need no longer be solved with smaller cars, but with highway trailers instead. This should accelerate the trend to larger cars.

Designed, ordered, or built during 1958—in addition to the longest TOFC cars—were high-capacity covered hopper cars for grain service; 5,400 cu ft wood-chip hopper cars; 78-ft, double-deck automobile transporters; and 20,000-gal. tank cars. This trend will continue. It must as another step toward increasing the efficiency of railroad operation.

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BROWNHOIST 150 TON DIESEL WRECKING CRANE

Designed specifically to meet rail, bridge and trestle load restrictions, the new Brownhoist 150 ton Diesel Wrecking Crane embodies the rugged construction, greater efficiency and low maintenance features found on the famous Brownhoist 250 Ton Diesel Wrecking Crane. Diesel engine is equipped with a torque convertor, and the crane travels on 2, six-wheel equalized steel side frame trucks. Operating cab is in right front corner with controls arranged for convenience and efficiency. All clutches are air operated.
Write for complete information.

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250 TON WRECKING CRANE


COAL ORE BRIDGE


CAR DUMPER


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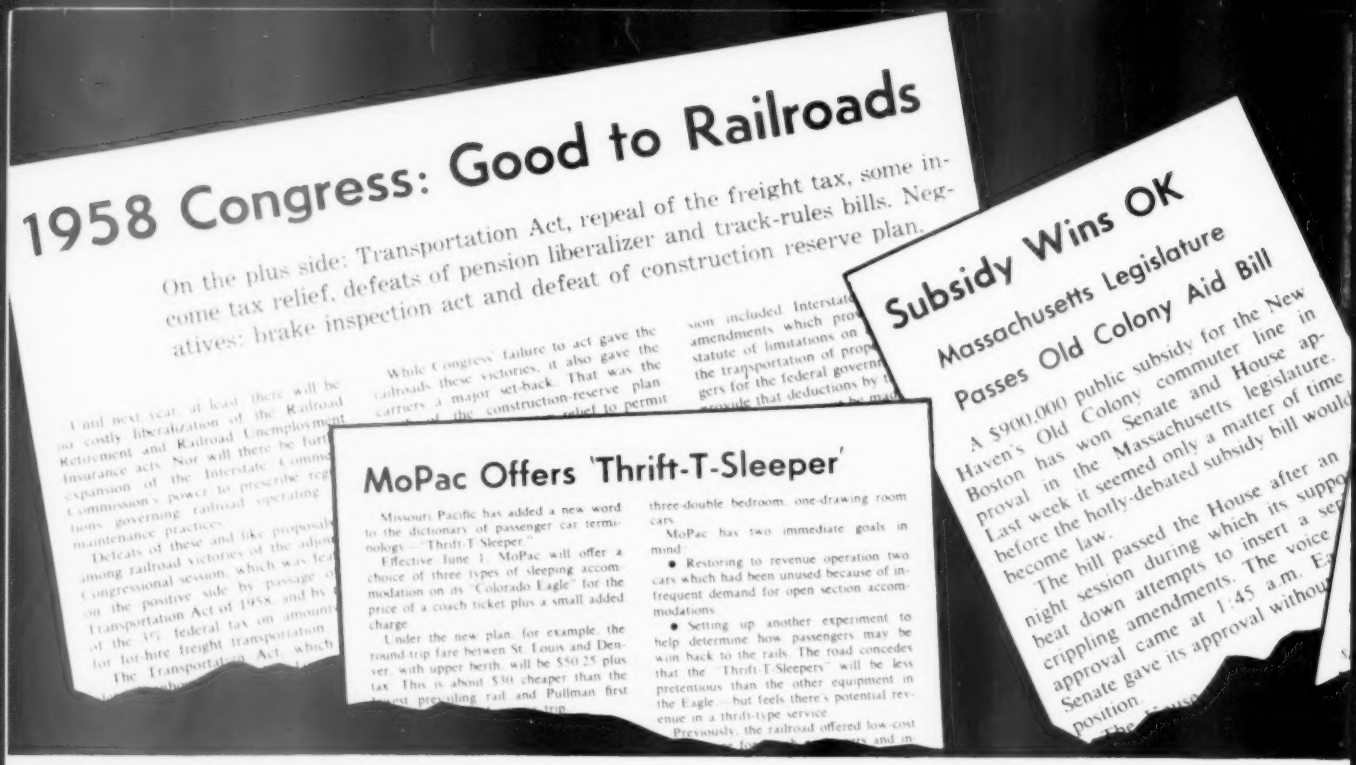

Top Railroad Stories of 1958

By LUTHER S. MILLER, News Editor

THE 1958 TRANSPORTATION ACT.—The No. 1 railroad story of 1958 began quietly last winter in Washington. To the Smathers hearings marched a long line of railroad men to describe the worsening plight of the industry—and to demand relief from lopsided government regulation. Congress listened, in late summer voted repeal of the 3 per cent excise tax on freight transportation, wrote other reforms into the Transportation Act of 1958. Many railroaders felt that the new Act promised more than it could deliver. The much-debated rate-freedom provision was, in its final form, ambiguous; the law authorizing government guarantee of rail loans was so "iffy" that by year's end only two roads—out of some 600 theoretically eligible—had applied. But half a loaf was better than none—and in Senate Resolution 303, calling for a new look at the whole question of transportation regulation, the railroads saw hope that the early future might bring them the other half.

RECESSION AND RECOVERY.—Recession clouds darkened the railroad scene during much of the year. Carloadings and revenues tumbled. In February, Class I roads as a whole were in the red by $9,000,000. Employment shrank to its lowest level in this century. Railroad spending declined sharply. In mid-summer carloadings started a slow climb back to normal, by November were running close to year-earlier figures. Rail common shares rose on Wall Street, reflecting a return to profitable operations by most roads. The final tally: 1958 net income dropped to an estimated $590,000,000, 20 per cent under 1957's net. Carloadings were down 15 per cent, passenger traffic 10 per cent. Rate of return sank to 2.7 per cent (compared with a postwar average of 3.7 per cent). Capital expenditures fell to $740,000,000, from 1957's $1.39 billion. But the year ended on a note of hope: shippers' boards predicted a 5.9 per cent increase in first quarter 1959 carloadings.

THE HOSMER REPORT.—Ranking high on the list of the best-covered railroad stories of the year (though many doubted its real significance) was the Hosmer Report. ICC Examiner Howard Hosmer gloomily predicted the end of rail passenger service in another decade—if present trends continued. It was a big "if," most railroaders thought. To forestall any such eventuality, many roads stepped up their "back to the rails" drive for passengers in the face of a 10 per cent decline in business. A sampling of new "passenger incentives": fare cuts (MoPac, Rock Island, MKT, Burlington); one-fare plans, with sleeper passengers paying coach rates, plus Pullman space charge (Burlington, MoPac, T&P, KCS, Milwaukee, GN, NP, B&O); free meals (C&O).

THE PIGGYBACK BOOM.—Brightest spot in the railroad picture in 1958 was piggyback. While carloadings generally were falling, piggyback loadings rose steadily, at year's end were running 11 per cent above 1957's. As of June 30, 88 roads (including 57 Class I line-haul carriers) were participating in TOFC tariffs. New York Central introduced Flexi-Van, which soon spread to the Milwaukee and Burlington. Santa Fe put 25 88-ft flatcars—longest ever built for piggyback service—into operation. Two new types of piggyback came in during the year: Plan III and Plan IV (under which private shippers furnish all or part of the needed equipment). Biggest interest was shown by freight forwarders. But ICC suspended many of the new forwarder piggyback rates, pending investigation.

THE FIREMEN ISSUE.—What many regarded as a major breakthrough on the "featherbedding" front came early in the year. A Royal Commission ruled that the Canadian Pacific didn't have to employ firemen on its yard and road freight diesels. Reluctant acceptance of the decision by the firemen's union averted a threatened strike—but at year's end the issue was declared an open one, the union contending it had been coerced into the CPR settlement. Rail labor made headlines elsewhere: Union leaders turned a cold shoulder to Teamster Chief Jimmy Hoffa's bid for an all-embracing league of transport workers. They fought unsuccessfully for extra retirement and unemployment benefits that would have cost the railroads an extra $185,000,000 a year. In Arkansas, the unions defeated a rail-led attempt to repeal the state's full-crew law; in Georgia they suffered a reverse, when a Federal court ruled against the union shop, holding that non-op employees couldn't be forced to pay dues that would be used for political purposes.

THE COMMUTER CRISIS.—In Boston, the New Haven won a precedent-shattering $900,000 public subsidy to keep its Old Colony commuter trains running for another year. In Philadelphia, the Pennsylvania and the Reading joined in an experiment in which they expanded their Chestnut Hill Service and cut fares (with limited city aid) in an attempt to cut commuter train deficits. Chicago commuter roads came up with a "no subsidy" plan for commuter relief; they asked for less regulation, more pricing freedom. New York commuter roads felt, for the most part, that some kind of subsidy was essential. The Metropolitan Rapid Transit Commission's $500,000,000 plan for a solution to the New York-New Jersey commuter tangle died in the New Jersey legislature. On the plus side: Some Philadelphia commuters on the Pennsy got new equipment: six Budd-built Pioneer III cars. So did Hudson & Manhattan commuters when the H&M accepted delivery of the first rapid transit cars to be built with air-conditioning.

MERGERS.—The year produced new candidates for corporate marriage: Atlantic Coast Line and Seaboard Air Line, two long-time Dixie rivals; Norfolk & Western and Virginian, a pair of prosperous coal roads; and five New England roads—New Haven, Boston & Maine, Maine Central, Bangor & Aroostook, Rutland. The year saw a continuation of previously announced merger talks, involving the Pennsylvania and New York Central; Great Northern, Northern Pacific, Burlington, Spokane, Portland & Seattle; and the Delaware & Hudson, Lackawanna, and Erie. MoPac and T&P called off merger plans. Meanwhile, the Erie and the Lackawanna showed that much could be accomplished short of actual merger: after a legal delay, they finally got their $1,630,000 track coordination project in New York under way.

THE MARCH OF TECHNOLOGY.—Eight pushbutton freight yards went into service in 1958. Electronic hotbox detection was at work on 14 roads. Over 1,000 miles of CTC were added. Use of damage prevention equipment increased. Union Pacific began testing the first of its 8,500-hp gas turbine locomotives. C&O, N&W and Pennsy developed a standardized 70-ton hopper car. Electro-Motive put two new diesels—SD-24 and GA-8—on the market. N&W banished steam from passenger runs, ordered enough diesels to complete the switchover from steam on a system-wide basis. First of Pacific Fruit Express's 1,000 dual-range mechanical reefers came off the line. Indicative of the growing emphasis on technological progress: AAR's announcement that it would build a new science laboratory at the Illinois Institute of Technology.

INCENTIVE RATES.—It was a year of pricing and service reforms. Eastern railroads filed an "incentive" rate on paint that was widely viewed as a test case to determine just how much new rate freedom the industry got in the 1958 Transportation Act. Late in the year Soo Line proposed the first of what may become a series of "agreed charges." "Hot-shot" freights between Chicago and the West Coast got hotter: the latest speedup resulted in a 60-hour timecard. In the East, a new "hot-shot" freight reduced running time between Caribou, Maine, and Boston to 17 hours, cutting a full day off the old schedule. The railroads, in 1958, manifestly were taking the advice of their good friend, Senator Smathers: "Stop complaining and get back to work."

COMMUNICATIONS GAINS

(Continued from page 62)

Biggest gain was scored by the Quebec, North Shore & Labrador, which installed 350 railroad telephones. The Wabash opened a new freighthouse in Chicago with 149 loudspeakers, including pagers, talk-backs and portable talk-backs to be carried by freight handlers. The New York Central and the Burlington also installed centralized checking systems in freighthouses during 1958. At the P&LE freighthouse in Pittsburgh, the foreman carries a Dick Tracy radio transmitter, which he can use to "get in" on the paging system (RA, Feb. 3, 1958, p.17). Such systems often pay for themselves in less than one year. The Central of Georgia installed centralized checking in freighthouses in Macon and Columbus, Ga. These two installations cost $10,988 and saved $26,067 annually. At this rate, they paid for themselves in five months (RA, May 12, p.26).

Yard loudspeaker systems made a healthy showing in 1958. Major yards so equipped were at Atlanta, Ga., on the Southern; at Youngstown, Ohio, on the Pittsburgh & Lake Erie; and at Pine Bluff, Ark., on the St. Louis Southwestern. With at least eight retarder classification yards under construction this year, yard loudspeaker system installations should continue at last year's rate.

Communications did well in 1958, and certainly should do as well during 1959. Efficiency and economy, the true test of any capital expenditure, aptly apply to the modern communications systems being installed on the railroads today and tomorrow.

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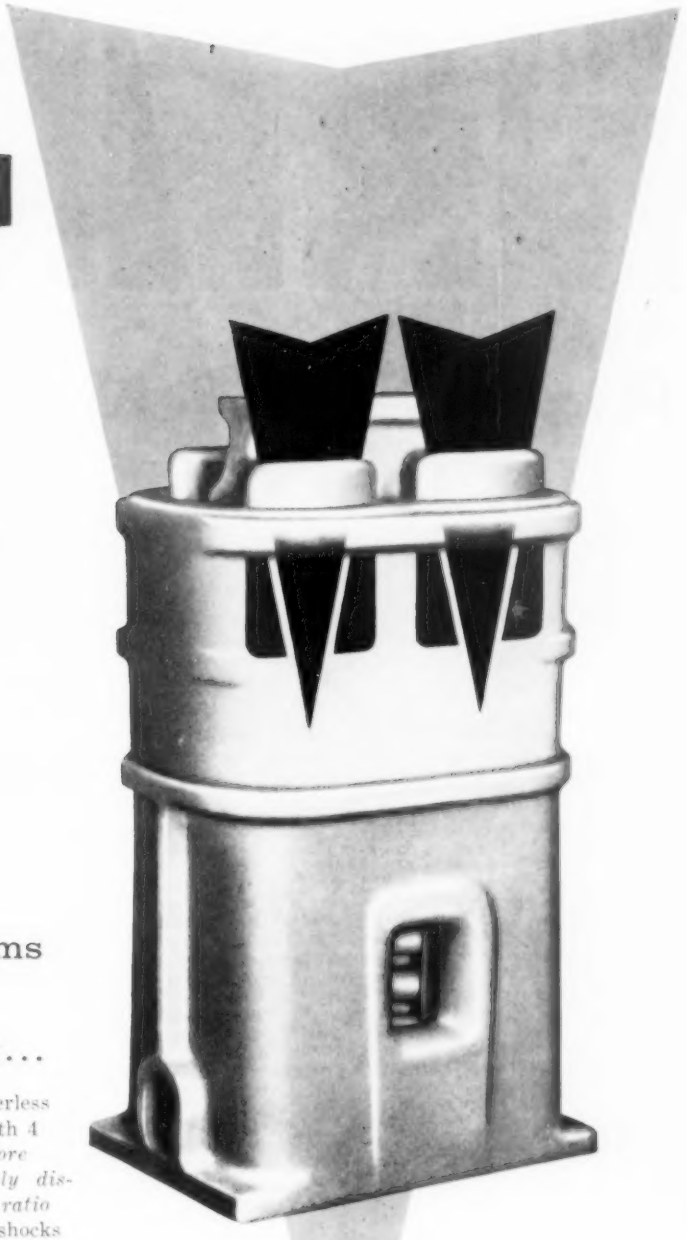

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People in the News

ANN ARBOR-MANISTIQUE & LAKE SUPERIOR.—Raymond G. Westfall, auditor, Toledo, retired Jan. 1 after 48 years' service.

ATLANTA & WEST POINT—WESTERN OF ALABAMA—GEORGIA.—W. T. Martin, general freight agent, Atlanta, Ga., appointed freight traffic manager there, succeeding **M. M. Albright, Jr.,** retired. **H. C. Tomassi,** assistant general freight agent, promoted to general freight agent, sales and service. **L. J. Linane,** assistant general freight agent, appointed general freight agent, rates and divisions. **C. E. Martin** named assistant general freight agent. **Floyd A. Mayfield** named assistant to general freight agent. All above are at Atlanta. **John J. Lorden** appointed eastern sales manager, New York. **Joseph R. Dehner** named western sales manager, Chicago.

BALTIMORE & OHIO.—Arthur W. Conley, general superintendent transportation, Baltimore, Md., appointed general manager, Western region, Cincinnati, Ohio, succeeding **Thomas C. Smith,** retired. **C. E. Bertrand,** assistant general superintendent transportation, succeeds Mr. Conley. **P. L. Faustman,** superintendent passenger transportation, replaces Mr. Bertrand.

BOARD OF TRANSPORT COMMISSIONERS FOR CANADA.—Jules M. Fortier, assistant counsel, promoted to general counsel, succeeding **Roderick Kerr,** appointed chief commissioner (RA, Nov. 10, 1958, p. 39).

BRITISH COLUMBIA ELECTRIC.—C. Alex Manson, assistant general sales manager, named rate engineer, to replace **Dr. H. L. Purdy,** executive vice president, as chairman of the company's rate committee.

BUREAU OF INFORMATION OF THE EASTERN RAILWAYS.—W. Scott Macgill, executive secretary, appointed chairman of the Executive Committee, New York, succeeding **James W. Oram,** vice president personnel, **Pennsylvania,** who continues as a member of the Executive Committee.

BURLINGTON.—W. F. Burke, passenger traffic manager Lines West, Omaha, appointed passenger traffic manager, Chicago. **R. A. Campbell,** assistant general passenger agent, Chicago, and **H. C. Wallace,** general agent, passenger department, named general passenger agents, Chicago and Omaha, respectively. **G. F. Bridges,** division passenger agent, Omaha, transferred to St. Joseph, Mo., to replace **Fred D. Clouse,** appointed general agent, passenger department, Chicago.

Russell B. James, general attorney, Chicago, retired Dec. 31, 1958.

Joseph W. Brennan, eastern traffic manager, New York, appointed assistant vice president-traffic there.

W. K. Bush, general tax agent, promoted to the newly created position of director of land and tax department, Chicago. **J. P. Reedy,** tax agent, named to succeed Mr. Bush. **J. B. Field,** assistant general land agent, named general land agent, Chicago, to succeed **J. W. Killey,** retired.

CANADIAN PACIFIC.—E. W. Morris, assistant engineer of car equipment, Montreal, appointed engineer of car equipment there, succeeding **Charles Hassell,** retired. **A. Teoli,** assistant engineer, office of chief of motive power and rolling stock, succeeds Mr. Morris.

A. E. Leach appointed general agent, Place Viger, Montreal terminals, succeeding **W. H. Wilson,** retired.

Hubert H. Scott, steamship passenger traffic manager, Montreal, retired Dec. 31, 1958. **E. F. Thompson** succeeds Mr. Scott.

J. E. Belanger, deputy chief, department of investigation, Montreal, appointed chief of that department, succeeding **Ben Bouzan,** retired. **James R. Johnston,** assistant chief of investigation, Prairie and Pacific regions, Winnipeg, Man., succeeds Mr. Belanger.

C. A. Sarsfield, district passenger agent, Toronto, appointed assistant general passenger agent there, succeeding **W. Robson,** retired. **George Walsh,** district passenger agent, St. John, N.B., replaces Mr. Sarsfield. **G. J. Fox,** passenger traffic representative, Vancouver, B.C., succeeds Mr. Walsh. **E. E. Hooper,** passenger agent, Chicago, named district passenger agent, Montreal, succeeding the late **Frank Fortier. R. S. Henry,** general agent, Minneapolis, transferred to San Francisco, to succeed **E. W. Travis,** retired. **E. A. Kenney,** general agent, Cleveland, retired.

CHICAGO & EASTERN ILLINOIS.—Robert E. McMillan, assistant superintendent of transportation, Chicago, promoted to superintendent of transportation. Mr. McMillan succeeds **Hugh S. Vierling** (RA, Jan. 12, p. 30) who, as assistant general manager, had also handled duties of superintendent of transportation.

COLORADO & SOUTHERN-FORT WORTH & DENVER.—E. A. Graham appointed assistant chief engineer, Denver, succeeding **W. S. Broome,** who retired Dec. 1, 1958.

DULUTH, SOUTH SHORE & ATLANTIC.—Leonard H. Murray, vice president, Minneapolis, elected president and a director, to succeed the late **Henry S. Mitchell** (RA, Dec. 1, p. 41). **A. G. Greenseth,** assistant to vice president, Minneapolis, named to replace Mr. Murray. **Thomas M. Beckley,** general solicitor and assistant secretary, advanced to general counsel and secretary.

ELGIN, JOLIET & EASTERN.—Frederic T. Brandt appointed manager of purchases and stores, Chicago, to replace **William G. Mateer,** who retired Dec. 31, 1958.

ERIE.—Herman G. Violand appointed assistant to vice president, Cleveland, Ohio.

FRISCO.—J. H. Brown appointed assistant chief engineer, Western district, and **O. E. Fort** named assistant chief engineer, Eastern district, both at Springfield, Mo.

E. R. Belt, vice president—finance, St. Louis, elected vice president—secretary and treasurer there, succeeding the late **C. C. Kratky,** secretary and treasurer (RA, Dec. 15, 1958, p. 50). In RA, Jan. 12, p. 31, Mr. Belt's appointment was erroneously reported under the heading of the Bangor & Aroostook.

NEW YORK CENTRAL.—R. S. Hamilton appointed assistant to vice president—operation, New York. **John D. Morrison,** commerce counsel in office of general solicitor, appointed assistant to vice president—law.

F. E. Weaver appointed transportation superintendent, New York Terminal division.

Louis S. Bottinelli, assistant chief signal engineer, Cleveland, named chief signal engineer—system at that point, succeeding **Harrison A. Scott,** (RA, Nov. 3, 1958, p. 42).

NEW YORK, SUSQUEHANNA & WESTERN.—Daniel F. Merriam, traffic manager, Paterson, N. J., appointed vice president—traffic. **Harold C. Williams,** assistant traffic manager, named traffic manager. **Thomas B. Dwyer,** general freight and passenger agent, appointed assistant traffic manager. **Peter Molenaar,** assistant freight and passenger agent, named commercial agent. **Leonard F. Spencer,** purchasing agent and general storekeeper, appointed commercial agent.

NICKEL PLATE.—Leroy J. Goodman, assistant engineer, Cleveland, appointed division engineer, Buffalo-Cleveland divisions, Conneaut, Ohio, succeeding **Ernest R. Taylor,** who retired Dec. 31, 1958.

NORFOLK SOUTHERN.—Ashby C. Sturdevant, general agent, Detroit, retired Dec. 31, 1958. Sales and service matters heretofore handled by the Detroit office, which has been closed, will be handled by General Agents **F. D. McMillan,** 905 Arrott building, 401 Wood street, Pittsburgh 22, Pa.; **B. E. Geeslin,** 1023 Federal Reserve Bank building, Cincinnati 2, Ohio; and **J. H. Grotheer,** 2037 Bankers building, 105 West Adams street, Chicago 3, Ill.

Duane W. Coad, assistant comptroller, **Minneapolis & St. Louis,** Minneapolis, Minn., appointed assistant to chairman of the board of the NS.

NORFOLK & WESTERN.—C. P. Blair, assistant general manager of the N&W and general superintendent, eastern general division, Roanoke, Va., appointed assistant vice president, a new position. Mr. Blair's primary duties will be the promotion and development of coal traffic. **W. S. Clement,** assistant general superintendent, eastern general division, named general superintendent. **Fred K. Prosser,** general coal traffic manager, retired Dec. 31, 1958. **F. B. Wright,** general coal freight agent, appointed coal traffic manager. **Walter A. Light,** coal freight agent, succeeds Mr. Wright. **D. J. Howe** and **F. L. Donaher,** coal traffic managers, named coal traffic managers—service. **B. F. Smith,** division freight agent, Norfolk, Va., retired Dec. 31.

(Continued on page 145)

The number one insulation for over a half century!

SIX MAJOR REASONS WHY LEADING REFRIGERATOR CAR LINES SPECIFY *Streamlite* HAIRINSUL

1. **LOW CONDUCTIVITY.** Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour per degree F., per inch thick.

2. **LIGHT WEIGHT.** Advanced processing methods reduce weight of Streamlite Hairinsul by 40%.

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6. **HIGH SALVAGE VALUE.** The all-hair content does not deteriorate with age, therefore has high salvage value. No other type of insulation offers a comparable saving.

Since Hairinsul was first used in refrigerator cars more than 50 years ago, it has protected millions of dollars worth of perishables through all weather conditions—no matter how severe.

Present-day Streamlite Hairinsul, the result of improved processing methods, offers refrigerator car builders 40% less weight. The factor of lighter weight, added to the five other exclusive advantages of Hairinsul, assures refrigerator car builders today's more efficient insulation.

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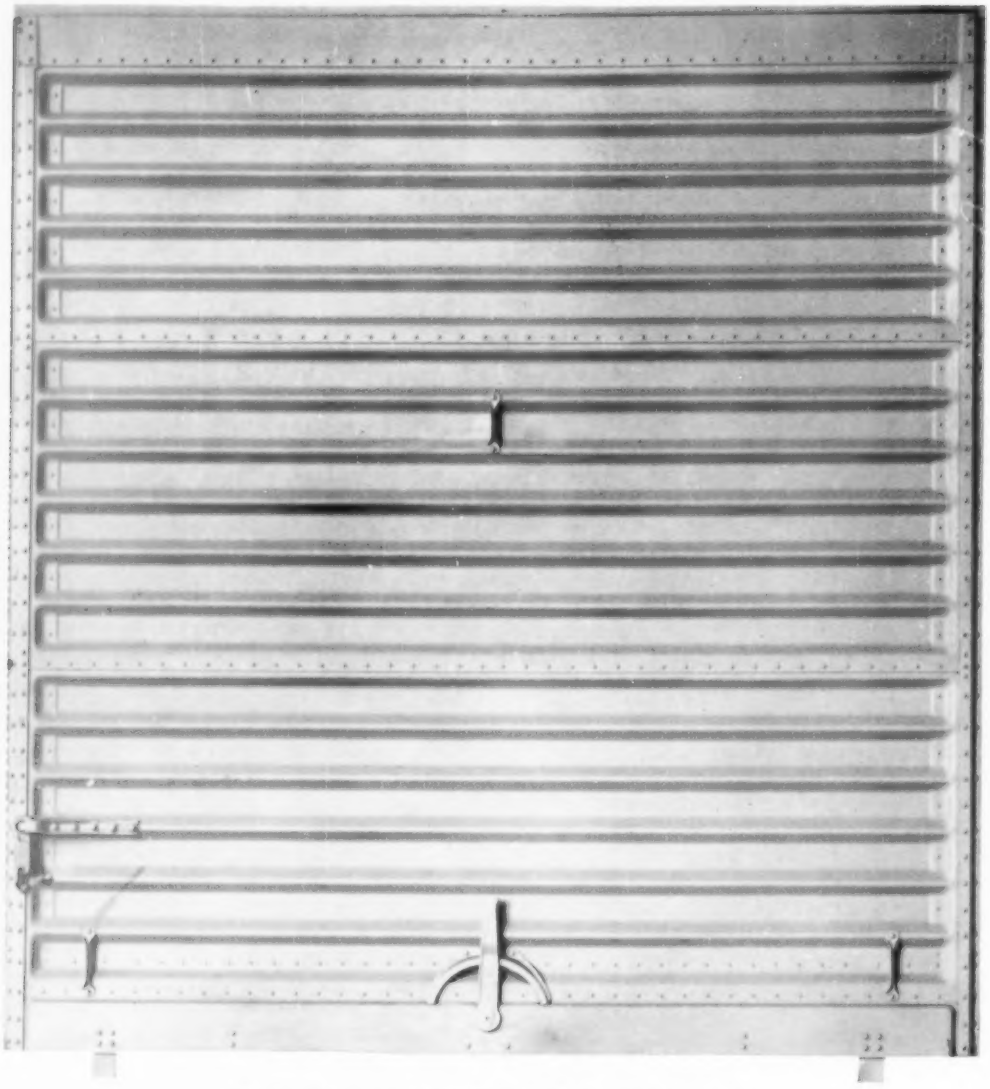

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MARKET OUTLOOK *at a glance*

Freight Carloadings

Loadings of revenue freight in the week ended Jan. 10 were not available as this issue went to press.

Loadings of revenue freight for the week ended January 3 totaled 467,699 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, January 3

District	1959	1958	1957
Eastern	73,569	71,432	91,074
Allegheny	81,277	84,712	115,099
Pocahontas	40,180	39,772	45,448
Southern	90,459	94,268	106,801
Northwestern	50,575	51,379	60,529
Central Western	94,134	89,396	95,635
Southwestern	37,505	41,325	46,615
Total Western Districts	182,214	182,100	202,779
Total All Roads	467,699	472,284	561,201
Commodities:			
Grain and grain products	43,962	42,897	42,886
Livestock	3,041	3,890	5,218
Coal	97,773	98,127	105,713
Coke	8,163	6,741	12,403
Forest Products	26,284	28,694	33,677
Ore	12,950	15,519	20,372
Merchandise l.c.l.	31,763	34,907	42,139
Miscellaneous	243,763	241,509	298,793
January 3	467,699	472,284	561,201
	1958	1957	1956
December 27	431,938	409,598	487,546
December 20	570,927	590,314	698,424
December 13	588,847	603,140	716,652
December 6	594,476	617,836	738,251

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Jan. 3 totaled 4,780 cars, compared with 3,466 for the corresponding 1958 week.

IN CANADA.—Carloadings for the ten-day period ended Dec. 31, 1958, totaled 81,325 cars, compared with 66,806 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
December 31, 1958	81,325	33,269
December 31, 1957	66,003	32,047
Cumulative Totals:		
December 31, 1958	3,770,988	1,407,690
December 31, 1957	4,037,346	1,619,131

New Equipment

FREIGHT-TRAIN CARS

► *Repair Ratio 3.8% Higher Than Last Year.*—Class I roads on Dec. 1 owned 1,728,643 freight cars, 43,638 less than a year ago, according to AAR report summarized below. Repair ratio was 3.8% higher than on December. 1, 1957.

	Dec. 1, 1958	Dec. 1, 1957	Change
Car ownership	1,728,643	1,685,005	—43,638
Waiting repairs	145,731	31,505	+114,226
Repair ratio	8.4%	4.6%	+3.8%

LOCOMOTIVES

► *Bath & Hammondsport.*—Ordered one 50,000-lb, 200-hp diesel switcher from Plymouth Locomotive Works for delivery in February 1959.

SPECIAL

► *New York Transit Authority.*—Air Brake Division of Westinghouse Air Brake Co. has received an order for $1,350,000 of brake equipment from American Car & Foundry Division, ACF Industries. The order, which includes couplers which automatically make and break car, air and electric connections between cars, is for 110 subway cars being built for NYTA. Delivery is set for second and third quarters of 1959.

New Facilities

► *Chicago & Eastern Illinois.*—Will install centralized traffic control over approximately 40 miles of main line between Clinton, Ind., and Danville, Ill. Project will be completed during 1959, will give C&EI approximately 165 miles of CTC operation between Danville and Evansville, Ind.

► *Katy.*—Will build a new freight house at Baden Yard, St. Louis, Mo. Road's present house has been sold and will be converted to a public bonded warehouse. The new facility is expected to be completed within a year.

► *Louisville & Nashville.*—Will spend over $45,000,000 in 1959 for improvements and new equipment. Major expenditure will be $28,000,000 for 3,000 new 70-ton coal hopper cars (RA, Dec. 1, p. 39). Among other items: main track relocation, new freight yard, new passenger and freight stations at Chattanooga, Tenn., $4,823,000; new passenger station at Birmingham, Ala., $331,000; extension of teletype facilities over entire system for mechanized car accounting and tracing, $409,000; improvements of telephone and communications system between Louisville and New Orleans, $304,000.

► *Missouri Pacific.*—Directors approved 1959 facilities modernization program involving expenditure of $15,117,520. Major projects include: continuing construction of $13,000,000 classification yard at

(Continued on the following page)

MARKET OUTLOOK (continued)

Kansas City, Mo., $4,279,000; branch line construction of approximately 23 miles between Cadet, Md., and Pea Ridge, $2,773,000; new rail program, $2,979,000, and bridge and trestle work, $1,471,000.

► *New Labrador Railway Planned.*—Pickands Mather & Co., a Cleveland iron mining and management company, has announced it is letting contracts for construction of 53 miles of new railway in the Wabush Lake area of Labrador. Object is development of iron ore deposits in the area. The new railway is expected to link up with the Quebec, North Shore & Labrador, which now ties into deposits held by Iron Ore Co. of Canada.

► *Northern Pacific.*—Facilities improvement program for 1959 includes: $5,400,000 for rail and track material in a program covering 73 miles of main line and 49 miles of branch line relay (32 miles of main line relay will be continuous welded rail); $1,600,000 for ballasting; $1,400,000 for roadway and shop machinery and tools and work equipment, including $350,000 for 20 air-dump cars and $225,000 for installation of a wheel truing machine at Livingston, Mont., diesel shop; $1,000,000 for completion of centralized traffic control installation between Garrison, Mont., and Missoula; $693,000 for modernization and improvements to heating facilities at various points.

► *Rio Grande.*—Improvements program for 1959 will involve expenditure of approximately $3,450,000. Major projects are: shop improvements at Burnham, Pueblo and Roper Yard ($1,142,000); construction of new fueling stations at Minturn, Colo.; Helper, Roper and Provo, Utah, ($116,500); installation of CTC between Dotsero and Bond and between Dotsero and Avon ($546,500); purchase of new roadway equipment ($281,000); equipment and improvements for research laboratory ($140,000). New rail program will include 6.5 miles of 119-lb rail in eastern Utah; 7 miles of 136-lb rail south of Salt Lake City; and 10.8 miles of 106-lb rail north of Salt Lake City ($1,116,000).

► *Reading.*—Will replace its fire-destroyed locomotive and car repair shop at Newberry Junction, Williamsport, Pa., with a new prefabricated steel diesel locomotive repair shop. March completion is scheduled for the 302-ft by 60-ft building.

► *Southern Pacific.*—Will install centralized traffic control on 140 miles of main line between Lordsburg, N.M., and El Paso, Tex., at a cost of approximately $3,000,000. The project, to be completed late in 1959, will connect with a 124-mile CTC installation now nearing completion between Lordsburg and Mescal, Ariz.

Maintenance Expenditures

► *Down 10.8% in October.*—Expenditures by Class I roads for maintenance of equipment, way and structures in October 1958 were down about $31.1 million compared to the same month in 1957, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	Oct. 1958	Oct. 1957	% Change
Maintenance of Way & Structures	107,355,338	123,296,556	−12.9
Maintenance of Equipment	148,107,163	163,275,176	− 9.3
Totals	255,462,501	286,571,732	−10.8

Organizations

CANADIAN INSTITUTE OF TRAFFIC AND TRANSPORTATION.—Provisional officers appointed: President, J. T. MacKenzie, Toronto; 1st vice president, V. M. Stechishin, Winnipeg; 2nd vice president, J. T. Mitchell, Montreal; treasurer, I. H. Lute, Toronto; auditors, R. E. Barron, St. Catherines and A. A. Landry, Toronto; general manager, R. Eric Gracey, Toronto.

CAR DEPARTMENT ASSOCIATION OF ST LOUIS.—New officers are: President, Joseph J. Helle, St. Louis Refrigerator Car Company; first vice president, Clayton S. Mace, Pennsylvania; second vice president, Hugh D. Smith, Terminal Railroad Association; third vice president, J. C. Heyer, Missouri Pacific; secretary, John J. Murphy, American Refrigerator Transit; treasurer, Jesse A. Howell, Shippers Car Line; chairman of the executive committee, Leonard West, Alton & Southern.

MATERIAL HANDLING INSTITUTE, INC.—New officers are: President, Eugene Caldwell, general manager, Baker Industrial Trucks; 1st vice president, C. L. Fell, vice president—marketing, American MonoRail Co.; 2nd vice president, Robert F. Moody, sales manager, Domestic Industrial Truck Division, Hyster Company.

METROPOLITAN NEW YORK CHAPTER, I.C.C. PRACTITIONERS.—Officers elected for 1959 are: Chairman, Stephen Tinghitella, manager transportation division, Commerce & Industry Assn. of New York; vice chairman, R. E. Costello, commercial counsel, Lackawanna; secretary, L. Ahearns, freight traffic officer, Brooklyn Army Terminal; treasurer, R. J. Janer, general traffic manager, Penn-Dixie Cement Corp.; members executive committee, F. P. Ierardi, director of distribution, Underwood Corp., and M. E. Kiel, transportation attorney.

RAILROAD FOREIGN FREIGHT AGENTS ASSOCIATION OF CHICAGO.—Officers elected for 1959 are: President, Charles C. Mitchell, foreign freight agent, Erie; vice president, J. J. Chessare, export and import agent, Missouri Pacific; secretary, R. J. Degnan, assistant general freight agent, Chicago & North Western; treasurer, R. F. Magee, manager, world commerce department, Chesapeake & Ohio.

RAILROAD JOINT FACILITY CLUB OF CHICAGO.—R. B. Page, joint facility examiner, Rock Island, elected chairman, and John Zechlin, joint facility accountant, Elgin, Joliet & Eastern, elected secretary.

RAILWAY SYSTEMS & PROCEDURES ASSOCIATION.—Grant C. Vietsch has been appointed executive director, Washington, D.C., succeeding Raymond E. Hoyne, retired.

TRAFFIC CLUB OF NEW YORK.—New officers are: President, Eugene J. Dean, assistant vice president, Erie; 1st vice president, John S. Carlson, director of transportation, Stauffer Chemical Co.; 2nd vice president, Arthur E. Bayliss, vice president, New York Central; treasurer, Arthur H. Brown, traffic manager, St. Regis Paper Co.; secretary, George H. Burtis, assistant traffic manager, Luckenbach Steamship Co.

TRANSPORTATION ASSOCIATION OF AMERICA.—Dale W. Hardin, legislative attorney, Interstate Commerce Commission, joined the TAA on Dec. 1, 1958, as executive assistant.

(Continued from page 122)

ST. LOUIS RAILROAD DIESEL CLUB.—F. C. Whitlock, Terminal Railroad Association of St. Louis, 876 Union Station, St. Louis 3. Regular meetings, second Tuesday of each month, Hotel York, Dinner, 7 p.m.; meeting, 8.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, 30 Church St., New York 7.

SOUTHEASTERN RAILWAY CLUB.—H. W. Brewer, Seaboard Air Line, P. O. Box 6531, Jacksonville, Fla. Regular meetings, second Tuesdays in February, April, June, August, October and December, Mayflower Hotel, Jacksonville.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—D. G. Sudderth, P. O. Box 1205, Atlanta 1. Regular meetings, third Thursday in January, March, May, July and September at Atlanta. Annual meeting in November.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—F. L. Linham, Southern Ry., Atlanta 3. Annual meeting, January 28-29, Mayflower Hotel, Jacksonville.

TORONTO RAILWAY CLUB.—W. F. Saunders, P. O. Box 8, Terminal "A", Toronto 1. Regular meetings, fourth Monday of each month except February, June, July, August and December, Royal York Hotel.

WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—V. L. Sides, Illinois Central, Room 305, 135 E. Eleventh Pl., Chicago 5. Semi-annual meeting, February 10, Palmer House, Chicago. Regular meetings, 12:15 p.m. first Wednesday of each month, except July and August, Traffic Club, Palmer House, Chicago.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1. Regular meetings held in February, March, April, May, October, November and December (Ladies night).

WEED CONTROL by UROX

Sensational Granular Herbicide Gives Longer-Lasting Control... *at Lower Cost!*

Railroads all over the country are finding they can control weeds and brush faster, easier, for a longer time and at lower cost with General Chemical's UROX Weed Killer.

Long-term control! Even in areas of heavy rainfall, UROX will usually maintain control of weeds for an 8-month period. In areas of lighter rainfall, control may remain effective for as long as 18 months after a single application.

Effects are cumulative! UROX tends to build increasing soil sterility. Its herbicidal action can thus be extended from one year to the next with small booster doses. As smaller and smaller amounts are used over a period of time, you realize substantial savings.

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You get fast results! You can see control in as little as 10 to 14 days.

Cuts labor costs, too! Fewer applications . . . no mixing . . . cumulative effects—they add up to significantly lower costs. What's more, you can apply UROX in the winter, when many maintenance crews are idle.

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People in the News

(*Continued from page 138*)

1958 and that position abolished. All matters formerly handled by Mr. Smith will be handled by **C. M. Francis**, assistant freight traffic manager, Norfolk. **L. G. Reimann**, passenger agent, Chicago, named general western passenger agent there, succeeding **J. W. Ryan**, retired.

R. D. Pedigo, assistant to superintendent car service, named superintendent car service, Roanoke, succeeding the late **W. E. Allen**. **H. I. Thomason**, car accountant, appointed assistant superintendent car service. **C. E. Mills**, chief clerk, advanced to assistant to superintendent car service.

NORTHERN PACIFIC.—Consolidation of the road's central and eastern district accounting offices at St. Paul announced. In charge of the new office will be **J. K. Ryan**, named district accountant, to succeed **W. J. Drannen**, who retired Jan. 1 after 48 years' service. Mr. Ryan was formerly assistant to the comptroller, St. Paul.

ONTARIO NORTHLAND.—**G. W. Willoughby**, traveling auditor, North Bay, Ont., appointed assistant auditor of revenues and is succeeded by **R. J. Bailey**.

PENNSYLVANIA.—**Roy A. Lewis**, assistant trainmaster, Chicago, appointed trainmaster, Buffalo, succeeding **William D. Murphy**, named manager of Conway Yard, near Pittsburgh.

William G. Presley, passenger manager, Buckeye region, Cincinnati, Ohio, transferred to Philadelphia, succeeding **Frank M. Ware**, retired. **Robert K. Helmuth**, passenger sales representative, Philadelphia, transferred to the Northern region, Buffalo. **Charles W. Linker**, district passenger manager, Columbus, succeeds Mr. Presley. **William H. Sickinger**, passenger representative, Columbus, replaces Mr. Linker. **Benjamin D. Rhodes**, sales manager, Pacific States, San Francisco, retires Feb. 1.

Leonard T. Apple, assistant superintendent of shops, Pittsburgh, appointed supervisor of car equipment, Northern region, Buffalo.

William J. McKinley, superintendent of stations, Southwestern Region, Indianapolis, transferred to the Buckeye Region, to succeed the late **Robert P. Smith**.

H. G. Allyn, district sales manager, New York, appointed manager of freight sales and services, Buckeye Region, succeeding **Joseph A. Armento**, promoted to sales manager, Pacific States, San Francisco.

Frank H. DeMoyer, assistant valuation engineer, appointed valuation engineer, succeeding **Spencer Danby**, retired.

George E. Thomas, coal sales representative, Pittsburgh, named supervisor of coal sales, Cincinnati, succeeding **William B. Neal**, promoted to assistant manager of coal traffic sales and rates, Chicago.

George A. Royce, assistant manager of insurance, Philadelphia, appointed manager of insurance there, succeeding **Oswald D. Moore**, retired.

Albert M. Schofield, assistant superintendent of transportation, Fort Wayne, Ind., transferred to Columbus, succeeding **Collins S. Van Gunten**, promoted to assistant to general manager of industrial development, Philadelphia. **James L. Forrester**, trainmaster, Toledo, transferred to Fort Wayne, to replace Mr. Schofield.

L. G. McSteen named district passenger manager, Chicago.

SANTA FE.—**J. E. Eisemann**, district engineer, Southern district, Amarillo, Tex., appointed chief engineer there, succeeding **J. A. Noble**, retired (RA, Dec. 15, 1958, p. 50). **R. E. Knapp** named to replace Mr. Eisemann.

SEATRAIN LINES.—**A. A. Munro**, eastern traffic manager, New York, **J. A. Hughes, Sr.**, general freight agent, New York, and **R. G. Barnes**, southwestern traffic manager, Houston, Tex., have retired. **Lee Soorikan** appointed administrative assistant to president. **John A. Hughes, Jr.**, chief clerk, rate department, promoted to assistant general freight agent, New York. **Gerald R. Wenzel**, southwest freight agent, Dallas, Tex., named sales manager, Houston. **Robert P. Schully**, commercial agent, New Orleans, appointed sales manager.

SOUTHERN.—**Frank M. Kaylor**, division engineer, Greensboro, N.C., appointed superintendent, Charleston division, Charleston, S. C., succeeding **Carl S. White, Jr.**

Harvey H. Bradley, trainmaster, Asheville, N. C., appointed superintendent, Winston-Salem, N. C., succeeding **Ben L. Stanfiel**, who retired Jan. 1.

WABASH.—The following retirements announced, effective Dec. 31: **Harvey E. Dixon**, assistant passenger traffic manager, St Louis; **George G. Kottenstette**, general passenger agent, Chicago; **Edwin F. Hamma**, chief of tariff bureau, St. Louis; **Thomas C. Hayden**, district passenger agent, Cincinnati.

C. F. Manthey, assistant tax auditor, appointed tax auditor and is succeeded by **E. R. Murray**.

Emil J. Rohlfing appointed assistant passenger traffic manager; **Charles W. Carter**, general passenger agent; **Frank F. Bottini**, manager of rates and divisions; **George M. Irvin**, assistant general passenger agent, and **Maurice H. Gramann**, division passenger agent, all with headquarters at St. Louis.

Supply Trade

Robert A. K. Smith, district sales manager, **Scullin Steel Company**, has been appointed a vice president in sales for the Southwest Region, with headquarters remaining at St. Louis. **William J. Ennis** has been named regional sales representative at Chicago.

A dealer network selling exclusively to the railroad market has been set up by the **Four Wheel Drive Auto Company**, Clintonville, Wis. The network will cover all major railroads in the United States and Canada. The company manufactures heavy-duty trucks and other specialized vehicles. The new railroad dealers are: **Caesar Baldassari**, 420 Market street, San Francisco, who will cover all railroads headquartering in California and Nevada; **R. A. Corley**, 744 Broad street, Newark, N. J., New York, Pennsylvania, New Jersey and New England; **Clarence Gush**, Railway Exchange building, St. Louis Missouri, Arkansas, Oklahoma and Texas; **T. C. Johnson Co.**, 2796 Woodhill street, Cleveland—Ohio, Kentucky and lower Michigan; **Missco Transportation, Inc.**, 80 E. Jackson blvd., Chicago—Illinois, Indiana, Wisconsin, Iowa and upper Michigan; **Roth Railway Supply Co.**, 2235 St. Mary's avenue, Omaha;—Nebraska, Colorado and Utah; **Robert J. Wylie Co.**, 612 Pioneer building, St. Paul—Minnesota; **Melville Machinery Co., Ltd.**, 515 Bisson street, Montreal—Canada.

The sales department of **Bethlehem Steel Company** has moved to 375 Park avenue, New York 22, from 25 Broadway.

James L. Ramsey, manager of railroad sales of the **Wyandotte Chemicals Corporation**, has

James L. Ramsey

Joseph M. Mann

been promoted to New England district sales manager at Boston, Mass. **Joseph M. Mann**, special representative—railroads, has been appointed railroad sales manager at Wyandotte, Mich., succeeding Mr. Ramsey.

The Railway Equipment & Publication Company has announced the appointment of **Allen F. Clark** as advertising manager of the **Pocket List of Railroad Officials**, succeeding **John A. Pattee**, now secretary. Mr. Clark was formerly advertising manager of Bakelite division of Union Carbide Corporation. **A. M. Bartley**, assistant to advertising manager, has been appointed to the new position of assistant advertising manager.

Cyrus R. Osborn, vice president of **General Motors Corporation**, has been named chairman of the Advisory Committee of the **Transportation Center** at **Northwestern University**, succeeding **Fred G. Gurley**, chairman of the **Santa Fe**, who retired from the Center's chairmanship Jan. 1.

Don C. Livingston has been named manager, two-way radio sales, **Motorola Communications & Electronics, Inc.**, in a ten-state southern area bounded by New Mexico, Oklahoma, Arkansas, Tennessee and Georgia. Mr. Livingston is succeeded as regional manager in Kansas-Missouri and southern Illinois by **William H. Hawks**, formerly a zone manager in Kansas City, Mo.

The Youngstown Sheet & Tube Company has announced the following appointments: **Richard J. Stamberger**, assistant district sales manager, New York, named manager of the new Trade Relations department; **Robert W. Walling**, assistant manager, appointed manager of high strength ("Yoloy") sales, Youngstown; **Roy A. Curl**, manager of sales promotion to manager of sales promotion and advertising, Youngstown; **Robert B. Davidson**, from Cleveland district sales office, to assistant manager of "Yoloy" sales, Youngstown; **Dean N. Frederickson**, from Chicago district sales office, to assistant manager of conduit sales, Youngstown; **Herbert L. Furse**, from St. Louis district sales manager, to assistant manager of line pipe sales, Youngstown; **Oscar H. Reuter**, from resident salesman at Louisville, Ky., to assistant manager of standard pipe sales, Youngstown; **Robert K. Stephens**, carbon bar, rod and wire sales, Youngstown, to assistant manager of that department; **William H. Stokes**, tin plate sales, to assistant manager of that department, Youngstown; **Frank A. Anderson**, from Chicago district sales office, to district sales manager, St. Louis; **John C. Clark**, New York district sales office, to assistant district sales manager, New York; **William E. Fender**, Indianapolis district sales office, to assistant district sales manager there.

Frederick Kenner has been elected president of the **Ansonia Wire & Cable Company**, Ashton, R. I., succeeding **J. S. Chafee**.

You Ought To Know...

Welded rail will be introduced in a new area this spring when the Canadian National installs a 14-mile stretch on its mainline between Moncton and Halifax, N. S. The 1170-ft lengths to be used will be the first in CNR's Atlantic region, and, except for a stretch on the Gananoque, Ont., subdivision, the first on the CNR system.

Thrift-T-Sleeper service between St. Louis and Hot Springs, Ark., went into effect Jan. 15. It's MoPac's first extension of the service that has proved so popular on the "Colorado Eagle."

A 7 per cent increase in traffic is foreseen by the New York Central in 1959—but, says NYC President Alfred E. Perlman, "to me that isn't a very great boom, and compared to other years, it isn't a very bright year." He said preliminary estimates showed the Central would finish 1958 in the black.

The Magellan, the former private car of Presidents Roosevelt and Truman, will be preserved for public display at the University of Miami at Coral Gables, Fla. It was turned over last week to the Florida Development Commission.

Recall of 77 workers to the Elgin, Joliet & Eastern's car shops at Joliet was announced last week. The recall was necessitated by a stepped-up car repair program, involving principally gondolas and covered hoppers.

Atlantic Coast Line has opened a new industrial development office in Tampa, Fla. ACL, points out P. J. Lee, resident vice president for Tampa, "has an important interest in the economic growth of Florida." The road recently announced plans for study of a $15,000,000 port development program in the Tampa area.

A tri-state conference on metropolitan New York's commuter problems is now set for early February. Participants: New York Gov. Nelson Rockefeller, Connecticut Gov. Abraham Ribicoff, New Jersey Governor Robert Meyner. Meanwhile, a Rockefeller-backed bill has been introduced in the New York legislature to create a State Department of Transportation to deal with transportation problems.

Caustic comments on the railroad situation came last week from Robert Moses, whose numerous public offices in New York include the chairmanship of the Triborough Bridge Authority. He wrote off completely integrated metropolitan transportation as an impractical dream. Elsewhere in a 6,000-word lecture at Cornell University, he called on railroads to stop "whining, junk their organs, tincups, monkeys and 'I Am Blind' signs and rescue what they used to call free enterprise."

Winners in the New York Railroad Club essay contest: first prize ($1,500), James R. Nelson, professor of economics, Amherst College; second prize ($750), Robert A. Nelson, associate professor of transportation, University of Washington; special honorable mention citation, George W. Wilson, assistant professor of transportation, Indiana University School of Business.

Honorary membership in the Brotherhood of Locomotive Engineers was bestowed on FBI Director J. Edgar Hoover by Grand Chief Engineer Guy L. Brown. The unusual distinction was given to Mr. Hoover for his efforts to preserve the freedom of American workers. Mr. Hoover, wearing engineer's cap and bandana, received the award in ceremonies in his office.

"Almost 100" passenger stations have been sold by the New York Central in the past two years, says James O. Boisi, the road's director of real estate. Price: over $1,500,000. Approximately 400 stations were originally included in the station-sales program.

Southern Pacific has been blocked, at least temporarily, in its plan to make the daily "Shasta Daylight" (San Francisco-Portland) a thrice-weekly operation. The ICC, citing complaints from users of the train, online communities and employee organizations, has ordered an investigation. And the "Shasta Daylight," scheduled to go on a thrice-weekly schedule Jan. 15, will remain a daily operation for the foreseeable future (the ICC's four-month suspension would expire May 15, but SP previously indicated it would run the train on a daily basis during the summer vacation season).

B&O has installed an aluminum liner to the sides and ends of a box car, the first of five car sets supplied by the Reynolds Metals Company. The liner is 40 in. high and progressively thinner from the floor up to the maximum height.

Next report on passenger terminal consolidation in Chicago may come early next month. It's expected to show whether three stations can be eliminated (Dearborn Street, LaSalle Street and Grand Central) and their traffic funneled into Chicago Union and Illinois Central stations. Among the most interested parties: the University of Illinois. Land which might be abandoned in a terminal consolidation is being considered as a site for a UI Chicago campus.

A new piggyback terminal opened in Toronto last week. CPR said the new Queensway Terminal resulted from expansion of piggyback operations to accommodate highway carriers in the western section of the city. The terminal has four sets of tracks with ramps and platforms to handle ten flatcars per track.

The 51-mile Montour has received Pennsylvania PUC authority to discontinue LCL service to all stations. An embargo on LCL shipments became effective Jan. 15. Montour operates between Coraopolis and Mifflin Junction, Pa. Pennsylvania and Pittsburgh & Lake Erie each hold 50 per cent stock ownership.

ADVERTISERS INDEX

"This index is an editorial feature maintained for the convenience of readers. It is not a part of the advertiser's contract and Railway Age assumes no responsibility for its correctness."

We were, we are, we will be for:

1. Immediate installation of the technological improvements now available. (See our "Tomorrow's Railroad" issue, Oct. 24, 1958.)

2. Immediate freight car purchases. Short term: the best financing plan possible. Long term: to compensate buyers, a per diem graduated both up and down to realistic levels. (See Sept. 4, 1957; Apr. 14, 1958, p. 50.)

3. Railroad promotion of passenger service through purchase of new equipment, improved scheduling, merchandising and pricing. (See "A Bold Proposal," May 19, 1958.)

4. Government assistance (public service payments) for losing passenger service where public interest requires its continuance and where the service cannot be made self-supporting. (See "Political Reality and the Passenger Business," Jan. 5, 1959.)

5. A government bureau in the Department of Commerce to promote the welfare of the railroads, similar to the CAA, the Public Roads Bureau and Army Engineers. (See Dec. 22, 1958, p. 58.)

6. Doing away with all employment that has no real duties attached. (See our "Trap" issue, Mar. 24, 1958.)

7. Rate-making freedom, so long as rates are compensatory. Legislation to release railroads from horse-and-buggy restrictions. The right to diversify. (See Continuing Outrage series, Jan. 13, 1958, Feb. 10, Mar. 3, Mar. 17, Apr. 21, June 23.)

8. On the part of the railroads, more marketing-mindedness, interest in customers' needs, sales training, etc. (See Aug. 11, 1958, p. 16-17, 37; Nov. 17, 1958, pp. 14-18, 42.)

9. Recognition that some mergers can pay off—but that mergers, per se, can duck the real railroad problem. (See Aug. 11, 1958, p. 42.)

10. A promotion effort to educate the people of America to the railroads' a) problems, b) opportunities. (See May 5, 12, 26, 1958.)

NYC's Robert R. Young classification yard at Elkhart, Indiana has eight nine-track units—a total of 72 tracks that can provide "soft-touch" handling of 3,540 cars a day. Okonite Type CM Cables are the connecting links that help keep the yard's electronic "thought center" automatic—and profitable.

How Okonite Type CM Cables assure automatic classification for the Central . . . save time and money, too

Nearly 100,000 feet of Okonite Type CM* Cables were buried along the tracks of the New York Central's new Robert R. Young Yard at Elkhart, Indiana. These are the vital links between the yard and its "brain"—an electronic computer—which makes automatic classification possible and profitable.

There's no room for failure in an operation built to handle 3,540 cars a day. That's why Type CM Cable was specified. Built specifically for underground installation Type CM is a light-weight, metallic tape armored protective covering for signal, control and power cables. It consists of a 5 mil, helically-wrapped corrugated bronze tape further protected with a substantial sheath of Okoprene

(Type CM-OT) or, in many instances, with a sheath of Okoseal (Type CM-PF) depending upon environmental conditions. This gives unusual compressive strength and makes it termite proof, rodent resistant, easy to handle (light-weight, flexible), not affected by soil conditions, heat, freezing temperatures or the elements.

Look into Okonite's Type CM Cables for all *your* vital circuits; stock one cable for direct burial, aerial, rack or duct use. Follow the lead of the Central . . . put Okonite Type CM Cable to work for you. Write for Bulletin RA 1121, to The Okonite Company, Passaic, New Jersey.

*Patent No. 2722562

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